#### OCONEE COUNTY PLANNING COMMISSION

415 South Pine Street - Walhalla, SC



TEL (864) 638-4218 FAX (864) 638-4168

6:00 PM, Thursday, January 25, 2018 COUNCIL CHAMBERS OCONEE COUNTY ADMINISTRATIVE COMPLEX

#### Members Present:

Mr. Pearson – Chairman , District 4 Mr. Kisker – Vice Chairman , District 1 Mr. Johnson – At-Large Mrs. McPhail – At-Large Mr. Gramling – District 3 Mrs. Lyles – District 5

Staff Present: David Root, County Attorney Adam Chapman, Zoning Admininstrator Media Present: None

1. Call to Order

Mr. Pearson called the meeting to order at 6:00 PM.

2. Invocation by County Council Chaplain

Mr. Root gave the invocation.

- 3. Pledge of Allegiance
- 4. Approval of Minutes
  - a. January 11, 2018
     Mrs. McPhail Motion
     Mr. Johnson Second

5. Public Comment for Agenda and Non-Agenda Items (3 minutes)

None

6. Staff Updates

Mr. Chapman stated that the 150th-anniversary celebration will be January 29, 2018, at the Oconee County Complex at 415 S. Pine Street. The Vegetative Buffer ordinance has passed the second reading in Council.

#### 7. Discussion on February meeting schedule

Mr. Chapman stated that February 19th is Presidents' Day and the County offices will be closed. The Commission agreed to move the second February meeting to the 22nd. Mr. Kisker made a motion to approve the meeting date and a second by Mrs. McPhail, the vote was unanimous.

#### 8. Discussion on Traffic Research

Mr. Chapman stated that he talked with South Carolina Department of Public Safety and Karl Addis, Oconee County Coroner and the following information was obtained. The act of driving, being a passenger or being on the roadway as a pedestrian in Oconee County has been fatal for over 400 people in the last 24 years. Between 2012 and 2017 there were almost 8,000 collisions that resulted in 81 fatalities and over 3,000 injuries. Highways 123/76, 11 and 28 are the highways with the highest incidents of total collisions. Highways 123/76, 11 and 130 are the County's most fatal roadways. Driving under the influence and driving too fast for the conditions and failure to yield the right-of-way are the top causes of all collisions within the County. Driving too fast for conditions and driving under the influence are conditions which may be reduced utilizing a multi-department, multi-agency approach with short, medium and long-range plans and goals.

Mr. Pearson asked if this information should be presented to County Council to get a directive on where the Planning Commission needs to go from here. Mr. Kisker stated the Commission needs direction on where to start on the Corridor Overlay District. Mrs. McPhail asked if the changes to the intersection at Highway 24 and Highway 59 has made any difference in the wrecks at that intersection. Mrs. McPhail asked if having a sign stating what speed a vehicle is going could be purchased by Oconee County and being placed different locations would help in speed control. Mr. Root stated he would talk with the Administrator and see which way to go with that request. A motion was made by Mr. Johnson and seconded by Mrs. McPhail for the County Attorney to take the request to the Administrator to see what direction to go with funding. The vote was unanimous.

#### 9. Discussion on Goals Element

Mr. Kisker stated that since the Capitol Project committee was disbanded should this be eliminated. Mr. Root stated that it should remain as a historical marker within the Element and in 2020 discuss whether to update it or remove it. Commission Chairman allowed Mr. Tom Markovich to speak and Mr.Markovich stated that it is required by state law for the Planning Commission to make recommendations on the Capital Plan to County Council.

#### 10. Discussion on Prioritization of Planning Commission goals for 2018

Mrs. McPhail stated that the Comprehensive Plan review needs to be complete by December of 2018. Mr. Pearson stated the Work Force Housing needs to be addressed. Mr. Johnson noted that the traffic and housing need to be addressed also bike paths are needed. Mr. Johnson

stated that adding alternative methods of transportation could help to alleviate congestion caused by Clemson students. Mr. Johnson stated that some sort of farmland protection program needs to be looked at this year by the Planning Commission. Mrs. McPhail stated that corridor and traffic issues need to be finalized. Mrs. McPhail also stated that municipality revitalization is important to help alleviate some of the traffic issues. Mr. Root stated that our Economic Alliance is very active in any businesses are looking at coming to Oconee County. Mr. Root suggested that Mr. Blackwell come and talk with the Commission about any upcoming projects. Mr. Pearson stated that there needs to be a Housing Task Force to promote affordable housing. Mrs. Lylkes stated that the Comprehensive Plan should be a priority and when issues come up in the future it can be addressed.

11. Old Business

None

12. New Business

Mr. Kisker noted that the successful recycling effort in this county was spearheaded by Bozo Richards who has passed away recently. Mr.Kisker noted that one person can make a difference and that it is important to recognize this fact.

13. Adjourn

Mr. Kisker made the motion to adjourn at 7:06 pm

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#### **Priority Investment Element**

#### Overview

Pursuant to the requirements of the South Carolina Priority Investment Act (PIA), adopted in 2007, local governments are required to include an element in their comprehensive plans that focus on anticipated capital expenditures over the coming 10 years, prioritizing those deemed most critical. The element must also discuss potential methods of funding for the projects, considering all likely federal, state, and local sources. Additionally, the PIA mandates that the list of projects includes all projected needs in public infrastructure and facilities, including water, sewer, roads, and schools, and that the list is provided to all "adjacent and relevant jurisdictions and agencies" for their review and comment. It should be noted that other requirements established by the Act are addressed in other elements of this plan.

#### **10-Year Capital Needs**

The Planning Commission is charged with identifying a list of those capital projects in Oconee County that are anticipated to be funded with public monies in next 10 years. The list of projects is to be reviewed and considered as part of the Planning Commission's annual recommended prioritization of projects for County Council. The source of projects to be considered on the list may be, but is not limited to, the listed needs of various County agencies on their 5-year Capital Improvement Plans (CIP), school board building programs, and other public infrastructure and facility requirements identified as critical to the citizens of Oconee County. Identified projects are listed on the "Ten-Year Capital Needs Plan for Oconee County", which is contained in Appendix A of this document.

#### **Funding Options**

#### Bonds

The primary source of revenue for county capital projects are General Obligation Bonds (G.O. Bonds). G.O. Bonds are secured by the County's projected future property tax revenue stream. It should be noted that the State of South Carolina limits the amount that local governments can borrow through G.O Bonds to 8% of the assessed value of the County's

votes; therefore, only those funds available within the 8% limit can be considered a steady funding source.

In order to project the amount of capital funding that Oconee County may reasonably expect to be able to access through bonds in the coming decade, it is necessary to review past activity and bonding capacity. It should be emphasized that the amounts derived through this process are based on history, and although relevant for the purposes of this examination, may not necessarily indicate future conditions. Table PI-1 (below) shows the total taxable assessed values for Oconee County from 2003 to 2008. The utilization of the values recorded over a 5-year period will typically include at least one reassessment of all taxable properties in the County, thereby updating those values and improving the accuracy, and making it possible to establish reasonably reliable averages to use in projecting future funding levels into the near future.

Table 1	PI-1
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Total Taxable Assessed Value by Fiscal Year							
						Average	Average
						Assessed	Percent
2013	2014	2015	2016	2017	2018 *	Value	Change
\$515,557,710	\$521,294,691	\$525,343,034	\$546,294,072	\$559,921,105	\$562,810,506	\$543,132,682	2%

Source: Oconee County Finance Department and Auditor's Office

\* 2018 Total Taxable Assessed Value is an estimate, due to actual values not being available at the time of this report.

Using the average assessed value of \$543,132,682 shown in Table PI-1, it is possible to establish a projected annual increase of 2% over the next 10 years. See Table PI-2 (below).

Table PI-2

P	Projected Legal Debt Limit for Oconee County for Fiscal Years 2019-2019			
Fiscal Year	*Assessed Property Value	**Debt Limit	***Outstanding Debt by Year	Projected Legal Debt Margin
2019	\$ 552,787,322	\$ 44,222,986	\$ 12,340,000	\$ 31,882,986
2020	562,613,583	45,009,087	11,291,000	33,718,087
2021	572,614,513	45,809,161	10,216,000	35,593,161
2022	582,793,218	46,623,457	9,105,000	37,518,457
2023	593,152,859	47,452,229	7,952,000	39,500,229
2024	603,696,650	48,295,732	6,758,000	41,537,732
2025	614,427,867	49,154,229	5,527,000	43,627,229
2026	625,349,840	50,027,987	4,255,000	45,772,987
2027	636,465,960	50,917,277	3,340,000	47,577,277
2028	647,779,678	51,822,374	2,390,000	49,432,374
2029	659,294,508	52,743,561	1,625,000	51,118,561

Source: Oconee County Finance Department and Auditor's Office

\* Assessed Property Value projections are based on the average annual change in the taxable assessment value from fiscal year 2013 through 2018, which resulted in 2%. Refer to Table PI-1. \*\* Under South Carolina Constitution Article X, Section 14, 7(a), Oconee County's outstanding general obligation debt should not exceed 8% of the total assessed property value. \*\*\* Projected values are based on existing fiscal year 2018 payment schedules.

The legal debt margin for Oconee County is projected to increase in the coming decade from \$31,882,986 to \$51,118,561 as a result of increased assessed property values. Naturally, any additional bonds utilized to fund capital projects in the interim would directly reduce the available amount, as would any significant decrease in assessed property values.

#### **Other Sources**

<u>Designated Funds-</u> Another option to provide a regular funding source for capital projects is to designate a specific portion of annual revenues as a 'set aside' for capital projects, much as Oconee County has done in the past with the reservation of one mill for economic development projects. Naturally, such a plan would only cover a limited portion of the overall capital needs of the County, but it would serve as a steady funding source for the purposes of planning for projects. One possible use for a regular set-aside could be to escrow the monies for specific multi-phased projects to be accomplished over a long period of time, or for those items that require significant upgrades on an ongoing basis. Also, for those projects that primarily serve only a limited region of the County but stimulate additional development, such as the expansion of infrastructure, it may be appropriate to designate a portion of the tax increment stemming from the new development, either to replenish the fund of designated monies, or to accomplish additional phases of the project.

<u>Special Tax-</u> In recent years, Oconee County has attempted to utilize a special one-cent capital infrastructure tax to assist in financing various projects. The tax, which has already been used in several other South Carolina counties, is governed by strict state guidelines that limit the applicability of funds primarily to the development and construction of a project. In brief, a 6-member commission made up of representatives from both the incorporated and unincorporated areas of the county creates a list of projects to be funded by the tax. The list is presented to County Council, who may either approve or reject the specified projects with no changes. If approved, the list of projects and projected costs are then part of a referendum question that must be voted on by the electorate. A majority vote supporting the tax initiates the levy, which will be in place no more than 7 years, with the tax ending sooner if actual revenues exceed the projected amount. If such an effort succeeds, the tax will be a reliable funding source for some projects; however, as with efforts to exceed the 8% assessable value limit on bond capacity by referendum, the outcome of votes cannot be reliably anticipated. Therefore, prior to the successful implementation of the one-cent capital infrastructure tax, it cannot be considered a steady funding source for future capital needs.

<u>Grants-</u> The use of grants become an increasingly important revenue component for many communities, with Oconee County being no different. In recent years, grants from state and federal agencies have enabled the County to move ahead with a number of projects that would otherwise have been delayed, or possibly even never realized. In spite of their value in providing needed funding, however, grants are at best of limited value for planning purposes, for the availability of funds needed for a specific project can seldom be reliably anticipated far enough in advance to allow for them to be considered a steady funding source. The competition for a limited pool of money from an ever growing number of potential applicants, combined with and the impact of the whims of economics and political moods,

often results in an ever-changing amount of grant funds. Grant money, therefore, while a wonderful supplement to turn to for specific capital projects, should not be considered a major steady source of revenue.

Impact Fees- A major revenue source for funding capital projects in some South Carolina counties is development impact fees. In spite of the fact that Oconee County has not enacted impact fees to date, they continue to receive public support as an option for funding roads, parks, libraries, and other capital improvements. It should be noted, however, that the South Carolina Development Impact Fee Act imposes a number of stringent requirements on local governments seeking to develop a program. For example, prior to the adoption of an impact fee for residential units, the local government must study and publish a report on the potential impacts of the fee on affordable housing within the jurisdiction. Also, the local ordinance creating the fee must specify the improvement that the money is to be used for, with the amount of the fee being based on verified costs or estimates established by detailed engineering studies. Once adopted, impact fees may be applied only for the period stated in the enacting ordinance, with all monies collected from the fee identified in a published annual report, detailing the collection, appropriation, spending of any portion. As a result, impact fees remain a viable alternative for Oconee County to consider as a funding source for future capital improvements, but the creation of a program will likely require significant assistance from an experienced consultant.

<u>User Fees-</u> Currently, Oconee County does not collect user fees for utilizing county-owned facilities. Although they can be considered a steady source of funding, user fees and other miscellaneous types of revenue typically generate only a portion of the amount associated with constructing and operating a facility. There are exceptions, however, for facilities such as recreation complexes many times combine these fees with concession monies, entry fees for events, and other miscellaneous revenues to achieve profitability, which can, in turn, be used to retire debt or upgrade a facility. Other types of facilities, however, simply do not lend themselves to the application of user fees. When appropriate, therefore, the County should consider user fees and other miscellaneous revenue as a funding source for capital projects.

#### **Projected Needs**

Currently identified Oconee County capital projects for which reasonable estimates have been developed are projected to cost \$86,421,000 over the coming decade, with several other potential projects for which reliable cost estimates have yet to be fixed receiving possible consideration. Because, as discussed above, Oconee County currently depends overwhelmingly on bonds as the only steady revenue source available to finance capital projects, for the purposes of this section we cannot count on grants and other funding sources that will offset at least some of the cost of individual items. Therefore, based on projected debt levels established in Table PI-2 (above), the bonding capacity necessary to provide sufficient funding for the total anticipated required amount will fall short by approximately \$27,944,000. See Appendix A.

#### **Another Consideration**

The anticipated rate of growth and development in Oconee County's future gives rise to the need for a systematic approach to paying for public infrastructure and development, for the level of service and convenience demanded by the many thousands of new residents will require a more efficient approach that has been evidenced in the past. While it is reasonable to assume coming growth will bring with it additional revenues with which improvements may be accomplished, not all growth is equal in the amount of revenue generated, or additional support required. In fact, without all of the necessary tools in place to manage the amount and type of growth necessary to make it sustainable, it is possible that the needs will outweigh the ability to pay for them. This means it is important to begin to consider the effects of all our actions in terms of the impact on development, positive or negative, and how the results change the level of service necessary to support it. Therefore, we should seek to establish how much growth our existing infrastructure and facilities can support, and map out a rational approach for moving toward the densities and type of growth the people of Oconee County desire.

#### **Priority Investment Objectives for the Future**

The following objectives are intended to address those needs and desires established within the Priority Investment Element. See the 'Goals' section of this plan for specific strategies and timelines for implementation.

1. Promote partnerships and voluntary conservation easements to preserve significant lands and scenic areas under pressure.

2. Continue support of a comprehensive planning process so as to ensure that the citizens of Oconee County possess accurate inventories and analyses of existing county conditions, and the opportunity to better manage anticipated future conditions.

3. Review, update and adopt the Infrastructure Master Plan.

4. Develop and implement an effective Capital Projects Program that provides the highest level of service and facilities for Oconee County's citizens.

5. Explore and evaluate alternative methods of obtaining revenue and grant monies to fund capital improvements and new infrastructure.

6. Create and/or update plans for specific priorities.

7. Complete and properly maintain Oconee County's Geographic Information System (GIS).

8. Encourage development in a way that protects and preserves our natural resources.

9. Manage development in a manner that ensures our natural resources and lifestyle enhance sustainable economic growth and job opportunities.

10. Promote and enhance access to affordable housing through both public and private cooperation.

11. Upgrade solid waste facilities to improve services and allow for needed upgrades and expansion to provide for anticipated growth.

12. Regularly review public safety needs and enhance facilities as required.

13. Work to address the age-related problems that may arise among Oconee County's aging population, particularly focusing on issues not adequately dealt with by state and federal efforts.

14. Upgrade and maintain the county road system in a manner that meets the needs of Oconee County's growing population and provides safe and efficient routes through the county.

15. Continue to evaluate and fund public transportation in urbanizing areas of Oconee County, expanding as needed to provide for ongoing growth and development.16. Expand bicycle and pedestrian routes to allow for greater use of alternative forms of transportation, and to promote ecotourism opportunities.

17. Continue upgrades to the Oconee County Airport in a manner that not only serves existing clientele, but will establish the facility as one of the premier small airports in the nation.

18. Establish programs to review all existing community facilities to determine needed changes resulting from both the aging of the facilities and the rapid population growth of Oconee County.

19. Promote a countywide arts program to facilitate an appreciation for the arts and other cultural facilities found within Oconee.

20. Conserve and protect features of significant local, regional and national interest, such as scenic highways, state parks, and historic sites and expand efforts to promote them for tourism.

#### Appendix A

Ten-Y	Year Capital Needs Plan fo	or Oconee (	County
Anticipated Budget Year	<b>3-Year Funding Timeframe</b>	*Estimated Cost (based on best information available)	**Funding Source(s)
2010	Detention Facility	\$ 15,000,000	G.O. Bonds
2010	Expand C & D landfill	\$ 650,000	G.O. Bonds
2010	Replace Long Mountain radio	\$ 300,000	G.O. Bonds
2010	Wastewater Treatment Facility to serve I-85 region	\$ 6,600,000	G.O. Bonds/ED Millage
2010	Westminster Fire/Emergency	\$ 2,500,000	G.O. Bonds
2010	10 Unit T-hanger and hanger taxiways	\$ 468,000	G.O. Bonds
2010	Purchase Land Adjoining Rock Quarry as it becomes available	\$ 275,000	G.O. Bonds
2010	Replace bath house (day use/ campers) at Knob Campground (High Falls)	\$ 180,000	G.O. Bonds
2010	Chau Ram Park- ADA bathroom and day use area	\$ 160,000	G.O. Bonds
2010	Back scan mortgages & Plats from 1999 – 2000	\$ 100,000	G.O. Bonds
2010	Cobb Bridge	\$ 1,200,000	G.O. Bonds/ Bridge Millage
2010	Assess Viability of Future Need for Old Courthouse; Sipplast modified roof membrane for Old Courthouse, or Demolition	\$ 555,000	G.O. Bonds
2010	Repave parking lot and roads at Solid Waste Complex	\$ 100,000	G.O. Bonds
2010	Phase I Golden Corner Commerce Park Infrastructure	\$275,000	G.O. Bonds/ ED Millage
2010	Court House renovation	\$ 5,000,000	G.O. Bonds
	Upgrade/relocate fuel farm and maintenance shed at the Airport	\$ 180,000	G.O. Bonds
	Oblique aerial photography reflight (Pictometry)	\$ 165,000	G.O. Bonds

	Expand Library in Westminster with FF&E (3,000 sq. ft)	\$ 1,000,000	G.O. Bonds
	Upgrade Cott (Data Processing System)	\$ 100,000	G.O. Bonds
	New library facilities in Seneca with FF&E (35,238 sq. ft)	\$ 9,100,000	G.O. Bonds
	Solid Waste building for tires, used oil, and aluminum	\$ 375,000	G.O. Bonds
	Hotel & Conference Center	\$ 5,000,000	G.O. Bonds
	Pave South Cove parks gravel roads and overlay paved roads	\$ 142,000	G.O. Bonds
	Phase 2, and 3 Golden Corner Commerce Park infrastructure	Phase 2 - \$ 1,350,000 Phase 3 - \$290,000	G.O. Bonds/ ED Millage
2010	Addition/Renovation at Seneca High School	\$ 5,000,000	G.O. Bonds
2010	Addition/Renovation at West Oak High School	\$ 5,000,000	G.O. Bonds
	5-Year Funding Timeframe Video imaging	\$185,000	G.O. Bonds
	Update Morgue Facility & Equipment	\$250,000	G.O. Bonds
	Phase 4 Golden Corner Commerce Park Infrastructure	\$655,000	G.O. Bonds/ ED Millage
	Speculative Building in Commerce Park	\$400,000 (plus proceeds from prior spec building)	G.O. Bonds/ ED Millage
	Phase 5 Golden Corner Commerce Park Infrastructure	\$975,000	G.O. Bonds/ ED Millage
	Upgrade Wastewater treatment facility for I-85 region	\$4,000,000	G.O. Bonds/ ED Millage
	8,000 sq. ft. Office Facility in Geographical Center of the County	\$1,800,000	G.O. Bonds/ ED Millage
	Develop and Construct Exit 3 in I-85 region	\$5,000,000	G.O. Bonds/ ED Millage
	South County Library, with FF&E	\$2,000,000	G.O. Bonds
	Renovate Library in Walhalla, with FF&E	\$1,750,000	G.O. Bonds
	Replace Bookmobile	\$250,000	G.O. Bonds
	ADA Bathhouse-campground for Chau Ram Park	\$180,000	G.O. Bonds
	Renovate campsites for High Falls Park (2 phases)	\$300,000	G.O. Bonds
	New office, store, visitor center with maintenance shop at South Cove Park	\$230,000	G.O. Bonds
	Dyar Bridge	\$1,400,000	G.O. Bonds/ Bridge Millage
	Lands Bridge	\$400,000	G.O. Bonds/ Bridge Millage
	Jenkins Bridge	\$300,000	G.O. Bonds/ ED Millage
	Mauldin Mill Road Culvert	\$250,000	G.O. Bonds/ Bridge Millage

	Purchase land adjoining Rock Quarry as it become available	\$275,000	G.O. Bonds
	Rubber tired front end pit loader for Rock Quarry	\$950,000	G.O. Bonds
	Purchase properties surrounding land fill as they become available	\$1,500,000	G.O. Bonds
2013	New Walhalla High School	\$40 – 50 million	G.O. Bonds
2013	Addition/Renovation at Tamassee-Salem Middle & High School	\$3 – 4 million	G.O. Bonds
	10-Year Funding Timeframe		
	Oblique aerial photography reflight	\$165,000	G.O. Bonds
	Video imaging (buildings)	\$185,000	G.O. Bonds
	Update Morgue facility and equipment	\$250,000	G.O. Bonds
	Purchase right-of-way extension of Commerce Way in OCCC	\$1,000,000	G.O. Bonds/ ED Millage
	Extend Commerce Way to Armstrong Road	\$1,200,000	G.O. Bonds/ ED Millage
	Purchase additional acreage for OCCC	\$1,500,000	G.O. Bonds/ ED Millage
	Business incubator/training center- partner with Tri- County Technical College	\$3,000,000	G.O. Bonds/ ED Millage
	Build a speculative building	\$400,000 (plus proceeds from prior spec building)	G.O. Bonds/ ED Millage
	Build an additional speculative building	\$600,000 (plus proceeds from prior spec building)	G.O. Bonds/ ED Millage
	New Superintendents House for Chau Ram	\$120,000	G.O. Bonds
	New bath house facility in South Cove campground	\$220,000	G.O. Bonds
	Replace fishing pier at South Cove	Cost TBD	G.O. Bonds
	Camp Road culvert	\$250,000	G.O. Bonds/ Bridge/ Millage
	McGee Bridge culvert	\$400,000	G.O. Bonds/ Bridge Millage
	Lusk Road bridge	\$250,000	G.O. Bonds/ Bridge Millage
	Lonely Road bridge	\$250,000	G.O. Bonds/ Bridge Millage
	Nectarine Circle bridge	\$250,000	G.O. Bonds/ Bridge Millage
	Conley Road bridge	\$250,000	G.O. Bonds/ Bridge Millage
	Land adjacent to Rock Quarry as available	\$275,000	G.O. Bonds
	Upgrade or replace 1 Manned Convenience Center in high growth areas	\$750,000	G.O. Bonds
	Complete original Transfer Station Plan to meet with	\$1,000,000	G.O. Bonds

higher garbage volumes		
In-house tax software for tax center	Cost TBD	G.O. Bonds
Projected Capital Expenditures - County	\$86,421,000	
Projected Capital Expenditures - Schools	\$64,000,000	
<b>Total Projected Capital Expenditures</b>	\$150,421,000	

\*All costs are based on best information available

\*\*While grants and other one-time funds may be used for part or all of the required funding, Potential Funding Sources identified in the chart only include those sources considered steady

#### OCONEE COUNTY PLANNING COMMISSION

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# Overview of the 2018 Revision of the 2010 Comprehensive Plan

#### **Goals Element**

There are 20 goals in the Goals Element that have been completed or are completed and ongoing, below is a list of those goals.

- Work to facilitate the establishment of a partnership with water providers aimed at expanding service into underserved unincorporated areas of the county. (Page 2)
- Work to develop agreements with water providers to coordinate with County on a plan provide for required fire protection for new development. (Page 2)
- Implement requirements for all developer-initiated sewer expansions to be configured with sufficient capacity to allow existing and future affected property owners to connect to the proposed line. (Page 3)
- Partner with municipalities and Joint Regional Sewer Authority to coordinate efforts to provide sewer throughout high growth corridors. (Page 3)
- Study and establish increased access to sanitary boat dump stations on area lakes. (Page 3)
- Study and evaluate the impact of Oconee County's water supply on ISO ratings, and the resulting cost of fire insurance, seeking to identify opportunities for better ratings. (Page 5)
- Establish a county conservation bank to provide for the transfer of development rights and/or conservation easements to protect rural lands, sensitive areas, and significant natural resources. (Page 6)
- Identify and establish various funding sources for the county conservation bank identified above; these may include grants, corporate gifts, a percentage of development permit fees, and annual revenue designations. (Page 6)
- Provide appropriate assistance from county departments and agencies in efforts to identify and preserve historic structures, significant lands, and scenic areas. (Page 6)
- Review and update the various components of the Oconee County Comprehensive Plan as needed, not restricted to the minimum time periods established in state regulations.
- Complete digitization of parcel data, and implementation and integration of Tax Assessor's CAMA system. (Page 9)
- Expand public access to GIS, emphasizing the accuracy of data collected, usability of mapping website, and the maintenance of data collected. (Page 9)
- Establish and maintain a GIS administrative structure that not only promotes efficient service for county agencies, but also serves the mapping needs of other public and private entities. (Page 9)
- Adopt and enforce substandard housing regulations needed to ensure health and safety; this may include the adoption of the International Property Maintenance Code. (Page 14)
- Amend and adopt standards as necessary to maintain compliance with the Clean Air Act. (Page 16)

- Complete ongoing expansion of runway length and upgrade of instrument landing system. (Page 20)
- Develop ongoing capital improvements program aimed at upgrading facility to attract additional employers and potential occupants of business parks within the county. (Page 20)
- Study and identify any additional cultural and historic properties worthy of consideration on historic registers. (Page 22)
- Update and maintain GIS data and maps that can be printed and/or displayed on the county website, to provide the public with information on the location of historical and cultural sites. (Page 22)
- Review and adopt appropriate standards aimed at maintaining the state 'Scenic Highway' designation for SC Highway 11 and other routes; such standards may be based on adopted Scenic Hwy Corridor Plans or best practices, and may include the designation of the route as a County Scenic Highway. (Page 22)

#### **Population Element**

- Oconee County's population has continued to increase significantly since adoption of the 2010 Comprehensive Plan. *p. 1-2*
- The County's population has continued to grow at a slower pace during each decade beginning around 1970. Tween 2010 and 2016, the rate had slowed to 1.0% for that 6 year period. *p. 2-3*
- The leveling off in growth during that period may be attributed to the 2008 economic collapse. *p. 2*
- Continued increases are consistent with a national shift in population to the South and Southwest. *p* 3.
- The growth trend is expected to continue, with the greater portion of that increase attributed to a strong retirement community. *p. 3*
- The current national economic recovery and strong market for new student housing at Clemson University have resulted in strong population projections through 2030. *p. 3*
- The S. C. Budget and Control Board projects at 2020 population for Oconee County of 82,300, a 9 percent increase over the decade. *p. 3*
- Although Oconee County had a negative natural growth rate (births and deaths) between 2010 and 2015, the in-migration of new residents from other areas accounted for more than 80% of the County's population change. This is the largest migration increase of any County in the upstate. *p. 5*
- Oconee County is situated to take advantage of growth outward from Atlanta and the Research Triangle Area along the I-85 corridor as workers and industries seek cheaper land and that kind of lifestyle offered by a less densely populated region featuring exceptional natural resources and a high quality of life. *p. 10*

- Through 2014, the gender division of Oconee County's population is consistent with the national numbers. Approximately 51% of the residents were female. However, as late as 2014, the female population of Seneca, Walhalla and Westminster was significantly higher than the male population of those cities. *p. 11*
- the 2010 Census revealed that the median age of the United States was the highest that it had ever been, rising 1.9 years over the previous decade to 37.2 years of age. The median age of Oconee's population, however, surpassed this, rising from 39.5 years in 2000 to 43.4 years in 2010. *p 11*
- As of 2010, 90.7 % of County residents were counted in the white racial group. Statewide the percentage is much lower, at 67 percent. *p. 13*
- Oconee County students surpassed the state SAT averages and virtually mirrored the national averages in 2015. *p. 16*
- Oconee County continued to lead the upstate with 20% of its citizens receiving Social Security benefits as retired workers as of 2014, while percentages in adjoining counties Pickens and Anderson trailed behind at 14.3% and 16.2%, respectively. Oconee County's percentage was also significantly higher than the state average (14.4%). *p. 17*
- Comparing with state and national averages, Oconee was more than \$12,000 below the national average and more than \$4000 below the state in median household income as of 2014; and the gap was widening at that point with Oconee on a downward trend. Both the United States and South Carolina have been seeing yearly increases since 2013. *p. 18*
- In 2010, Oconee's poverty rate jumped to 16.6% from a 10.8% rate in 2000. Estimates from 2014 showed another increase in the rate, to 18.8%. *p. 19*

#### **Natural Resources Element**

- Highest Maximum Temperature 71.8F 1981-2010, Lowest Minimum Temperature 47.1F 1981-2010, page 2
- Highest Daily Rainfall 9.65 inches 1924, Annual Average 60.32 inches 1924, page 2
- Wettest Year 120.75 inches 2013, Driest Year 26.41 inches 2016, page 2
- Mean Snowfall 15 inches 1988, page 2
- Recorded Tornado Activity 1950-2016 Oconee (no specific location): 1950-2016, 15 injuries, Estimated Property Damage 6.29 million, page 4

#### **Cultural Resources Element**

Three more sites have been added to the National Resister of Historic Places in Oconee County since 2010. The total number of sites on the National Registry in Oconee County is now 20. New sites on the National Register of Historic Places:

- Faith Cabin Library
- Retreat Rosenwald School
- The Tamassee DAR School

#### **Community Facilities Element**

- Fire Protection added 1 Full-time station and 6 Volunteer stations, page 5
- Emergency Medical provide "Basic Life Support" throughout Oconee County, page 11
- Sewage Treatment the facility has allocated 4.378 MGD to all users which is 56 percent of the facility's total design flow, page 20
- Solid Waste added two unmanned collection sites (1 City of Westminster, 1 City of Walhalla), page 21
- Elementary and Secondary has 16 public educational facilities, the John Collins' Writing Program is now complete. The District added a second Chinese teacher; two elementary schools are providing Spanish programs, and one piloted Rosetta Stone program giving the option of learning French, German, Spanish, Mandarin Chinese or Japanese. Page 22-23

#### **Housing Element**

- Three new Census tracts 304.02, 306.02, 310 created to more accurately reflect the growing population. (Page 3)
- Between 2000-2015 the unincorporated areas of the County accounted for 53% of all new housing . (Page 6)
- As of 2013, there were 8,396 manufactured homes, which represented 21.7% of Oconee County's housing stock. (Page 8)
- As seen in table H-9A, by 2015, almost half of the County's vacant housing stock was seasonal, recreational, or occasional use. (Page 11)
- The median home value in 1999 for the County was \$91,300 and in 2015 was \$147,035. (Page 13)
- Control Free District, which, as the name indicates, imposes no use limitations on the parcel, [apart from perhaps setback requirements to the extent they are considered use limitations,] but establishes the conditions necessary to overlay limited performance standards in certain areas. (page 19)

#### **Economic Development Element**

- Total investment for the 2014-15 period was \$98.4 million. (Page 10)
- According to a report from Impact DataSource, between 2012 and the end of 2016, 25 economic development projects have resulted in \$279 million in new capital investments and more than 1,100 new jobs. The infusion of new jobs has grown the Oconee County workforce to 33,842, a record setting figure. (Page 10)
- The development and expansion of infrastructure may very well prove to be one of the greatest challenges to future economic development in Oconee County. (Page 16)

#### Land Use Element

- Agriculture, though still a significant part of the region's economic vitality, has a reduced land area footprint in recent years. *p. 1*
- The demand for housing in some market sectors has also continued to grow. Higher end single family development remains a strong component of land use, with much of that focus on lakefront communities on the eastern side of the County. *p.* 2
- A boom is underway in student housing development, due primarily to growth in Clemson University's student population and its renewed prominence at the national level. *p. 2*
- In 2008, Oconee County worked with a consultant to obtain current land use data to use as a tool for planning. As this was the first such attempt to identify usage on a countywide parcel level, it was intended to serve as a good baseline for measuring change in the future. *p.* 2
- Following completion of the review, a series of Planning District land use maps were created. These maps were presented at a series of community meetings, with local maps highlighted at each session. *p. 2*
- The current land and future land use maps contained in this document have not been updated from the 2010 plan. This will be done at a detailed level when the Comprehensive Plan is updated fully in 2020. The SC Comprehensive Planning Enabling Act of 1994 requires a complete update at least every 10 years. *p. 3*
- Record setting economic development activity in recent years has absorbed some previously undeveloped acreage, although much of the industrial and business development has involved the establishment of new industrial parks by the County and the expansion of existing uses, thus limiting the acreage footprint of these activities. *p.* 7
- With strong economic development comes strong job creation, a factor that typically has a multitude of impacts related to future planning issues, including transportation, housing and retail activity. Presently, according to the Oconee Economic Alliance, many jobs are open and available. Interestingly, many of these positions are not being filled promptly, and one reason cited by OEA is a shortage of workforce or affordable housing in the County. As previously mentioned, the luxury and second home market has been very strong due to lakefront development, but construction of homes in the \$100,000 to \$200,000 range has lagged behind. *p. 7*
- The County has amended the original Zoning Ordinance text on several occasions in recent years. An example is the adoption of a revised communication tower ordinance. Another is adoption of language clarifying the definition of billboards and their dimensional requirements in order to clearly distinguish between off-premise signs and on-site business signs. *p. 9*

The Commission is presently considering corridor ordinances for the principle highway corridors in the County, with an immediate focus on Highway 123 between Seneca and

Clemson. In addition, the Commission is considering possible revisions to clarify the Lake Overlay buffer provisions, which require a 25' vegetative buffer area to be maintained on parcels within the Overlay. There has been some confusion about the intent of the language as written, and these changes might help builders, property owners and staff to expedite the zoning permit review process as well as insure a proper outcome in the County's efforts to protect these sensitive lakefront areas. *p. 10* 

#### **Transportation Element**

- Interstate 85 was recorded in excess of 47,300 ADT's, page 6
- U.S. 76/123, and S.C. 28 are the busiest with up to 22,700 ADT's, page 6
- Wells Highway and short segments of other roads, with up to 12,000 ADT's, page 6
- Oconee County Regional Airport added 4 runways, in 2015 the addition of 600 feet was completed. A Jet Porter that moves big aircraft was purchased in 2017, page 13
- Oconee County has ten different Trail Miles totaling 88.9 miles, page 13

#### **Priority Investment Element**

- Using the average assessed value of \$543,132,682 shown in Table PI-1, it is possible to establish a projected annual increase of 2% over the next 10 years. See Table PI-2 (Page 1 and 2)
- The legal debt margin for Oconee County is projected to increase in the coming decade from \$31,882,986 to \$51,118,561 as a result of increased assessed property values. (Page 2)



#### **Revised 2010 Comprehensive Plan - DRAFT**

#### January 2018

Goals

**Population Element** 

Natural Resources Element

**Cultural Resources Element** 

**Community Facilities Element** 

**Housing Element** 

**Economic Development Element** 

Land -Use Element

**Transportation Element** 

**Priority Investment Element** 



#### Overview

This section contains the goals established by this Comprehensive Plan, which are based on the needs and desires set forth in the various elements. Each broad goal is supported by constituent objectives that address those identified needs, with appropriate strategies designed to ensure a successful outcome. It should be noted that specific objectives and strategies stemming from priorities established in more than one element have been appropriately stated to accomplish the desired results expressed in all elements (the elements to which each objective applies is noted). In addition, the county agencies deemed responsible for monitoring and facilitating the success of the effort are also named, as well as a timeline considered sufficient for completion.

#### Goal #1

## Preserve, protect, and enhance the quality and quantity of Oconee County's natural resources.

### Objective 1: Work to guarantee adequate water distribution systems for present and future economic development in Oconee County.

Applicable Elements: Community Facilities; Economic Development

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Work to facilitate the establishment of a partnership with water providers aimed at expanding service into underserved unincorporated areas of the county.	Planning Commission; County Council	2012 Completed/ Ongoing Link to Seneca and Salem
2. Partner with municipalities in inventorying current condition of their water infrastructure systems to determine ability to accommodate future growth.	Infrastructure Advisory Commission; Planning Commission; County Council	Ongoing
3. Work to develop agreements with water providers to coordinate with County on a plan provide for required fire protection for new development.	Emergency Services Commission; Planning Commission; County Council	2012 Completed w/ Fire Station 10 at end of FY17

## *Objective 2: Improve and expand wastewater treatment within Oconee County.*

Applicable Elements: Community Facilities; Economic Development

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Expand sewer service throughout areas designated by the Land Use Element as primary areas of development, while implementing appropriate limits needed to avoid negative impacts on sensitive areas.	Planning Commission; County Council	Ongoing
2. Implement requirements for all developer-initiated sewer expansions to be configured with sufficient capacity to allow existing and future affected property owners to connect to the proposed line.	Planning Commission; County Council	2012 Completed
3. Work with neighboring counties when possible to establish regional efforts to expand sewer service into prime commercial and industrial locations.	Planning Commission; County Council	Ongoing
4. Partner with municipalities and Joint Regional Sewer Authority to coordinate efforts to provide sewer throughout high growth corridors.	Infrastructure Advisory Commission; Planning Commission; County Council	Ongoing Completed/ Ongoing with sewer South to Golden Corner. Seneca & County did 13.2 miles.
5. Establish partnership(s) with regional, state, and federal agencies to find funding sources for wastewater treatment needs.	Planning Commission; County Council	Ongoing TVA / ARC GRANTS
6. Study and establish increased access to sanitary boat dump stations on area lakes.	Parks, Recreation, Tourism Commission; Planning Commission; County Council	2013 Completed Marinas at Keowee & Hartwell implementing

#### Objective 3: Initiate efforts to develop the foundation of a county storm water management program prior to federal mandates, thereby allowing for the most efficient and cost-effective implementation possible in the event of designation.

Applicable Elements: Population; Natural Resources; Economic Development; Land Use

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Study and evaluate options available to	Planning Commission;	2011
jurisdictions designated by EPA to establish storm	County Council	With next Census
water management programs, identifying those		Federal Regulations
attributes desirable for an Oconee County program.		will be required.
2. Work with state and federal agencies as required to	Planning Commission;	2011
create necessary components of storm water program,	County Council	The County actively
when possible, through a phased approach that will		complies with federal
lessen impact of meeting mandates.		and state mandates
3. Support regional efforts to protect watersheds.	Planning Commission;	Ongoing
	County Council	

## Objective 4: Establish a program of managing both water quantity and water quality throughout the county that will ensure efficient utilization, and appropriate conservation, of our greatest natural resource.

Applicable Elements: Population; Natural Resources; Economic Development; Land Use

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Work with state and federal agencies to establish a comprehensive network of water monitoring stations in Oconee County watersheds.	Planning Commission; County Council	2014
2. Establish accurate 7Q10 rating for all water basins in Oconee County.	Planning Commission; County Council	2014 This was created as a reaction to ATL proposed withdrawals from the Chattooga. Not done.
3. Develop a county-wide water usage plan that defines water conservation practices for both normal and drought conditions, and insures that all users share equally in restrictions during drought conditions.	Planning Commission; County Council	2012 Water Commission was created. No plans adopted.
4. Partner with both public and private entities to develop a county-wide education program designed to promote water conservation.	Planning Commission; County Council	2012
5. Study and evaluate the impact of Oconee County's water supply on ISO ratings, and the resulting cost of fire insurance, seeking to identify opportunities for better ratings.	Emergency Services Commission; Planning Commission; County Council	2012 Complete
6. Partner with adjacent jurisdictions on comprehensive water studies detailing availability from all sources and usages/outflows.	Planning Commission; County Council	Ongoing

#### Objective 5: Preserve, protect and enhance Oconee County's environmentally sensitive lands, unique scenic views, agrarian landscapes, and topographic features.

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Encourage use of "Best Management Practices" in	Planning Commission;	Ongoing
farming and forestry operations.	Soil & Water	Soil & Water
	Conservation	Conservation
	Commission's ;County	
	Council	
2. Work to partner with public and private entities in	Planning Commission;	2014
developing a countywide greenway system that will	County Council	Ongoing
offer opportunities for nature-based recreation in areas where few currently exist.		
3. Encourage and support collaboration between	Planning Commission;	Ongoing
landowners and public and private agencies in the	County Council	Establishment of
development of ecologically and economically sound		Oconee County
plans for preservation and restoration of forests and		Conservation Bank
farmland.		

Applicable Elements: Natural Resources; Land Use

### Objective 6: Promote partnerships and voluntary conservation easements to preserve significant lands and scenic areas under pressure.

Applicable Elements: Natural Resources; Land Use; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Establish a county conservation bank to provide for the transfer of development rights and/or conservation easements to protect rural lands, sensitive areas, and significant natural resources.	County Council	2011 Complete and Ongoing
2. Identify and establish various funding sources for the county conservation bank identified above; these may include grants, corporate gifts, a percentage of development permit fees, and annual revenue designations.	County Council	2011 Complete and Ongoing
3. Provide appropriate assistance from county departments and agencies in efforts to identify and preserve historic structures, significant lands, and scenic areas.	Planning Commission; County Council	Complete and Ongoing

#### Goal #2

#### Identify, develop and utilize all tools and funding sources necessary to meet the present and future economic development needs of Oconee County.

Objective 1: Continue support of a comprehensive planning process to insure that the citizens of Oconee County possess accurate inventories and analyses of existing county conditions, and the opportunity to better manage anticipated future conditions.

Applicable Elements: Population; Natural Resources; Cultural; Housing; Community Facilities; Economic Development; Land Use; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Review and update the various components of the Oconee County Comprehensive Plan as needed, not restricted to the minimum time periods established in state regulations.	Planning Commission; County Council	Ongoing & Complete
2. Improve communication and cooperation between the County and municipalities, state and federal agencies, and other public and private entities.	Planning Commission; County Council	Ongoing Improvements have been made

#### **Objective 2: Review, update, and adopt the Infrastructure Master Plan.** Applicable Elements: Economic Development; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Review and update the Infrastructure Master Plan, insuring that those steps identified provide for the future growth in the county and limit damage to sensitive areas and resources.	Economic Development Commission; Planning Commission; County Council	2011
2. Adopt and implement the Infrastructure Master Plan.	County Council	2011 Infrastructure Master Plan Created NOT Adopted
3. Utilizing the elements of the Infrastructure Master Plan as a guide, work to establish a sustainable infrastructure upgrade and maintenance program supported by a steady revenue stream.	Economic Development Commission; Planning Commission; County Council	Ongoing No adopted plan. County cannot control State / City Roads

## *Objective 3: Develop and implement an effective Capital Projects Program that provides the highest level of service and facilities for Oconee County's citizens.*

**Timeframe for** Agencies **Completion & Strategies for Success** Responsible Notes Planning Commission; 1 Seek partnerships with other agencies, Ongoing municipalities, and private industry to eliminate County Council Building Codes is unnecessary redundancy in facilities and services. "one-stop" shop for power and sewer. County shared planner. Health Services Offices partnered with Clemson. DMV in County Treasurer's Office. 2. Maintain a Capital Projects Plan with specifics on Planning Commission; Ongoing County Council estimated costs for upgrades and replacements, with timeframes for getting new estimates.

Applicable Elements: Population; Community Facilities; Priority Investment

## Objective 4: Explore and evaluate alternative methods of obtaining revenue and grant monies to fund capital improvements and new infrastructure.

Applicable Elements: Community Facilities; Economic Development; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Identify and work to establish alternative revenue sources such as special tax districts and local option sales taxes.	Planning Commission; County Council	Ongoing
2. Adopt appropriate development impact fees to offset some of the cost of infrastructure and public services.	Planning Commission; County Council	2012
3. Broaden utilization of grant monies to assist with capital projects.	County Council	Ongoing
4. Seek to establish public-private partnerships, user- based fees, and other revenue sources to help fund infrastructure.	County Council	Ongoing
5. Work with state and federal leaders to change formulas for state and federal funding that use Census figures that fail to account for the large percentage of non-resident property owners.	County Council	Ongoing

#### **Objective 5:** Create and/or update plans for specific priorities.

Applicable Elements: Population; Natural Resources; Cultural; Housing; Community Facilities; Economic Development; Land Use; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Review and update the Community Facilities Plan, amending it to reflect the impact of recent growth and the needs of the aging population.	Planning Commission; County Council	2012 Ongoing
<ul><li>2. Partner with municipalities to develop coordinated</li><li>5- and 10- year Economic Development Plans.</li></ul>	Economic Development Commission; Planning Commission; County Council	2014 Ongoing Propex facility, E.D. plans, Walhalla Industrial & Tech Park
3 Update and adopt the 2004 Infrastructure Master Plan.	Economic Development Commission; Planning Commission; County Council	2011
4. Evaluate, amend, and implement recreation plans, as necessary.	Parks, Recreation and Tourism Commission; County Council	Ongoing Recreation Task Force was created.

## *Objective 6: Complete and properly maintain Oconee County's Geographic Information System (GIS).*

Applicable Elements: Population; Natural Resources; Cultural; Housing; Community Facilities; Economic Development; Land Use; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Complete digitization of parcel data, and implementation and integration of Tax Assessor's CAMA system.	County Council	2011 Complete
2. Expand public access to GIS, emphasizing the accuracy of data collected, usability of mapping website, and the maintenance of data collected.	County Council	Ongoing Complete
3. Establish and maintain a GIS administrative structure that not only promotes efficient service for county agencies, but also serves the mapping needs of other public and private entities.	County Council	2010 Complete

## *Objective 7: Continue to actively promote the recruitment of employment opportunities that provide the best lifestyle for all Oconee residents.*

Applicable Elements: Population; Economic Development

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Work with state and federal agencies to attract agribusiness-related grants and revenue sources, and support efforts to establish pilot programs related to new agricultural technologies and products.	Planning Commission; County Council	Ongoing Oakway School & FARM Center
2. Provide appropriate assistance to expand non- traditional and specialty agribusiness opportunities.	County Council	Ongoing Agriculture Advisory Board
3. Continue partnerships in regional economic development recruitment efforts.	Economic Development Commission; Planning Commission; County Council	Ongoing OEA and Business Partenerships
4. Partner with area colleges and universities to expand local technical training facilities.	Economic Development Commission; Planning Commission; County Council	Ongoing Tri-County Tech at OITP
5. Develop sustainable funding mechanism to maintain availability of structures adequate for the needs of modern industry; this may include, but is not limited to, expansion of revenues designated to economic development, public-private partnerships, and grants.	Economic Development Commission; County Council	Ongoing Santee-Cooper Loan
6. Ensure that all governmental actions be considerate of racial, religious, and cultural groups that comprise Oconee County's population.	County Council	Ongoing

#### Goal #3

Establish an efficient, equitable, and mutually compatible distribution of land uses that complements Oconee County's traditionally rural lifestyle, yet supports sustainable economic development, protects the environment, and manages future growth and changes.

## Objective 1: Encourage development in a way that protects and preserves our natural resources.

Applicable Elements: Population; Natural Resources; Cultural; Housing; Community Facilities; Economic Development; Land Use; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Review and update existing land use regulations as needed, to facilitate development that preserves	Planning Commission; County Council	Ongoing
forests, prime agricultural lands, sensitive areas, and natural resources.		
2. Develop reasonable regulations regarding the development of steep slope areas.	Planning Commission; County Council	2011 Ongoing.
<ol> <li>3. Establish green space/open space requirements for new developments.</li> </ol>	Planning Commission; County Council	2011
4. Establish strategies and adopt measures necessary to create the framework for the efficient implementation of erosion and sediment control regulations.	Planning Commission; County Council	2011 Ongoing
5. Support efforts to educate public in the use of best management practices for construction sites.	Planning Commission; County Council	Ongoing Located in I.B.C.
6. Consider, and possibly adopt, regulatory components of a program to expand the natural vegetative buffer requirement to all lake front properties; this may or may not include provisions for increasing the size of the buffer to 50 feet.	Planning Commission; County Council	2013
7. Establish a mitigation program for littered and unsafe properties, utilizing funding from alternative funding sources such as state and federal grants, or possibly specialized tax levies.	Planning Commission; County Council	2012 Ongoing Litter control Ordinances and Officer

## Objective 2: Manage development in a manner that ensures our natural resources and lifestyle serve to enhance a sustainable economic prosperity.

Applicable Elements: Population; Natural Resources; Cultural; Housing; Community Facilities; Economic Development; Land Use; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Utilize the countywide zoning process to plan appropriate development and protect special areas through rezonings and overlays.	Planning Commission; County Council	Ongoing
2. Work to manage urban/suburban development in Oconee County to insure adequate infrastructure is in place to support balanced growth in primary growth areas, while limiting urban sprawl and protecting those areas deemed special.	Planning Commission; County Council	Ongoing
3. Identify potential county industrial sites in	Economic	Ongoing
appropriate areas, and work with public and private	Development	OITP (Money and
entities to secure funding to purchase select properties	Commission;	Development), Seneca
for potential projects within prime industrial areas.	Planning Commission;	Rail Site, Demo of
	County Council	Manufacturing Site in
		Westminster. Golden
		Corner Sewer
4. Promote a diverse economy that includes a mix of	Economic	Ongoing
employment sectors, including ecotourism, to insure	Development	Agri-Tourism, FARM
Oconee County remains economically competitive.	Commission;	Center, Oakway
	Planning Commission;	School
	County Council	

### Goal #4

Manage our community facilities, infrastructure, and public resources in a manner that ensures both the existing population and future generations may enjoy the benefits and economic opportunities that make Oconee County an attractive and affordable place to live.

# Objective 1: Seek local, state, and federal funding support in efforts to expand and enhance educational opportunities for Oconee County residents.

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Expand coordination of planning efforts with School District of Oconee County to ensure decisions related to school projects are made with the most complete information available, to include all issues related to infrastructure, accessibility, and traffic planning.	Planning Commission; County Council	2011 The State chooses sites and handles traffic issues.
2. Continue to look for opportunities to support and enhance job training, education, and adult back-to- school programs by fostering ties with area universities and vocational technical colleges; this may include promoting the development of satellite programs for better access by local residents.	Economic Development Commission; Planning Commission; County Council	Ongoing TCTC in OITP Career Day Fair Leadership Class
3. Provide the School District of Oconee County appropriate assistance in efforts to enhance and upgrade education.	County Council	Ongoing 2.2 Mils
4. Prioritize expansion and upgrades of libraries through the capital improvements plan and coordinate their location with available infrastructure and the location of schools.	Library Board; Planning Commission; County Council	Ongoing

Applicable Elements: Community Facilities; Economic Development

# *Objective 2: Promote and enhance access to affordable housing through both public and private cooperation.*

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Create a Housing Task Force, non-profit housing agency, or Trust which would analyze regulatory barriers and seek market-based incentives to promote affordable housing.	Planning Commission; County Council	2011
2. Review and amend land development and subdivision regulations as needed to provide incentives to promote the development of high-quality, low-cost housing.	Planning Commission; County Council	2012 Ongoing. Special Exemption for Habitat for Humanity
3. Work with state and local government to find funding sources, such as growth management infrastructure grants, to assist public and private entities seeking funds to develop and rehabilitate high- quality, low-cost housing.	Planning Commission; County Council	Ongoing
4. Work with local, state, and federal agencies to reduce barriers to affordability; this may include one- stop permitting, pre-approved affordable housing plans, and payback mechanisms for upgrades to infrastructure.	Planning Commission; County Council	Ongoing One stop pre-approval partnership with municipalities for low- cost housing
5. Adopt and enforce substandard housing regulations needed to ensure health and safety; this may include the adoption of the International Property Maintenance Code.	Planning Commission; County Council	2011 Complete

Applicable Elements: Population; Housing; Economic Development; Priority Investment

# Objective 3: Upgrade solid waste facilities to improve services and allow for needed upgrades and expansion to provide for anticipated growth.

Applicable Elements: Community Facilities; Economic Development; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Study options and develop long-range solution for the County's solid waste needs; these may include, but are not limited to, constructing an in-county landfill, partnering with other jurisdictions in developing a regional landfill, or the continuation of long-term contracts with outside parties.	Planning Commission; County Council	2011 Ongoing. Solid Waste Ordinance. Update Solid Waste Plan
2. Seek to partner in the development of a solid waste research facility at a regional landfill.	Planning Commission; County Council	Ongoing Regional Landfills dying
3. Identify and construct additional construction and demolition landfill sites within the county.	Planning Commission; County Council	2014 Expanding existing. Private landfills being built.
4. Work to reduce the volume of solid waste through increased recycling and composting.	Planning Commission; County Council	Ongoing
5. Seek out innovative and alternative technologies that not only provide for a long-term solution to current and projected solid waste needs, but may also be used in the future to mitigate and reclaim closed facilities.	Planning Commission; County Council	Ongoing Incinerators and Single Stream were studied and proved costly.
6. Seek and establish appropriate uses for closed landfill areas, which may include, but will not be limited to, the establishment of solar power generation facilities and appropriate recreation facilities.	Planning Commission; County Council	2014

# *Objective 4: Regularly review public safety needs and enhance facilities as required.*

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Review and upgrade existing emergency facilities plans on a regular basis, implementing established goals in a systematic manner.	Emergency Services Commission; Planning Commission; County Council	Ongoing
2. Provide local public safety agencies appropriate assistance in obtaining funding to expand and upgrade operations.	Emergency Services Commission; County Council	Ongoing
3. Coordinate local public safety planning and activity with regional, state, and federal agencies.	Emergency Services Commission; Planning Commission; County Council	Ongoing
4. Seek to partner with private entities in the development of emergency satellite facilities and specialized response equipment.	Emergency Services Commission; Planning Commission; County Council	Ongoing

Applicable Elements: Community Facilities; Priority Investment

# *Objective 5: Continue to monitor closely Oconee County's compliance with state and federal air-quality standards, adopting and maintaining reduction strategies as necessary.*

Applicable Elements: Natural Resources; Housing; Land Use

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Monitor results of current and future radon research.	Planning Commission	Ongoing
2. Partner with Home Builder's Association and other stakeholders to develop a radon response program; this may include, but is not limited to, an educational component that provides information related to both the cost-savings and potential health benefits of incorporating a radon-mitigation option in early construction stages, or the adoption of new standards requiring proven mitigation methods.	Planning Commission; County Council	2012
3. Amend and adopt standards as necessary to maintain compliance with the Clean Air Act.	Planning Commission; County Council	Ongoing/ Complete

# Objective 6: Work to address the age-related problems that may arise among Oconee County's aging population, particularly focusing on issues not adequately dealt with by state and federal efforts.

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Review and upgrade county-owned medical/residential/nursing care facilities as needed.	County Council	Ongoing
2. Support municipalities in efforts to establish public transportation, seeking ways to expand into various parts of the unincorporated areas as appropriate.	Planning Commission; County Council	Ongoing CAT bus grant
3. Continue to explore ways to increase the efficiency of emergency medical services throughout the county.	Emergency Services Commission; County Council	Ongoing GHS EMS medical response targets.
4. Seek partnerships with public and private entities to study age-related issues, particularly as they relate to potential impacts on Oconee County.	County Council	Ongoing

Applicable Elements: Population; Community Facilities; Priority Investment

# Objective 7: Upgrade and maintain the county road system in a manner that meets the needs of Oconee County's growing population and provides safe and efficient routes through the county.

Applicable Elements: Population; Community Facilities; Economic Development; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Develop an ongoing systematic road maintenance and upgrade program based on a steady revenue sources.	Road Department; Planning Commission; County Council	2012 Ongoing
2. Develop and maintain a priority road upgrade list that not only considers existing traffic 'bottlenecks' and other sources of trouble, but also reasonably anticipates those expected to emerge in the coming decade.	Road Department; Planning Commission; County Council	2012 Ongoing
3. Consider and adopt appropriate traffic management tools and techniques that utilize concepts such as limiting the number of curb cuts in high-traffic areas.	Road Department; Planning Commission; County Council	Ongoing
4. Prioritize evaluation of all roads lying within primary development areas shown on the Future Land Use Map.	Road Department; Planning Commission; County Council	Ongoing
5. Continue to require developers to provide traffic studies to determine if a road must be upgraded to safely handle increased traffic loads and to cover the costs of road upgrades when necessary.	Road Department; Planning Commission; County Council	Ongoing
6. Enhance communication with local and state D.O.T. staff and projects.	Road Department; Other County Staff	Ongoing

# Objective 8: Continue to evaluate and fund public transportation in urbanizing areas of Oconee County, expanding as needed to provide for ongoing growth and development.

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Promote and assist in the establishment of commuter parking lots to help encourage car pooling, and decrease traffic congestion.	Planning Commission; County Council	Ongoing
2. Continue to partner with Clemson Area Transit (CAT) in keeping existing services, while looking for other opportunities to expand public transportation, to include, but not be limited to, van services and other non-traditional forms of mass transit.	Planning Commission; County Council	Ongoing Non- traditional not included. Two mass transit studies. Funding issues involved ( Busses are \$300k each)
3. Seek and secure methods of expanding transportation in remote areas for clients of facilities such as DSS, hospitals, medical complexes, government facilities, and parks.	County Council	Ongoing Shared area of Responsibility
4. Support efforts to establish a high-speed rail stop in Clemson, SC and/or Toccoa, Georgia.	Planning Commission; County Council	Ongoing
5. Seek and establish appropriate methods of mass transit that will promote and enhance tourism; these may include, but are not limited to, water taxis, tour boats, and other modes of transport that allow tourists and residents to enjoy natural resources without dramatically increasing traffic.	Mtn. Lakes Conv. & Visitors Bureau; Parks, Recreation and Tourism Commission; County Council	Ongoing Self-guided tourism , camp ground upgrades

Applicable Elements: Population; Transportation; Priority Investment

*Objective 9: Expand bicycle and pedestrian routes to allow for greater use of alternative forms of transportation, and to promote ecotourism opportunities.* Applicable Elements: Natural Resources; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Develop standards that encourage developers to	Planning	2013
incorporate sidewalks and bicycle trails into subdivision	Commission;	Ongoing
developments.	County Council	County parks / ramps
		upgraded
2. Seek grants for creating nature trails, sidewalks, bicycle	County Council	Ongoing
lanes, and other tools designed to make communities more		
walkable, reduce vehicle traffic, and improve safety for		
pedestrians and cyclists.		
3. Upgrade county-maintained parks and recreational	Parks, Recreation	Ongoing
facilities to encourage and promote ecotourism opportunities	and Tourism	
	Commission;	
	County Council	

# Objective 10: Continue upgrades to the Oconee County Airport in a manner that not only serves existing clientele, but will establish the facility as one of the premier small airports in the nation.

Applicable Elements: Community Facilities; Economic Development; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Complete ongoing expansion of runway length	Aeronautics	2014
and upgrade of instrument landing system.	Commission; County Council	Complete
2. Construct planned future upgrades, to include	Aeronautics	2014
relocation of roads, strengthening of runway, as well as any other necessary components as funding becomes available.	Commission; County Council	Ongoing
3. Construct additional hangar space as needed to	Aeronautics	
accommodate anticipated demand.	Commission; County Council	Ongoing
4. Develop ongoing capital improvements program	Aeronautics	2014
aimed at upgrading facility to attract additional	Commission; County	Complete and Ongoing
employers and potential occupants of business parks within the county.	Council	
5. Seek and establish ways to utilize airport to foster	Aeronautics	Ongoing
partnerships with Clemson University	Commission; County	Clemson Flying Tigers
	Council	& Hangar lease
		agreements.

### Objective 11: Establish programs to review all existing community facilities to determine needed changes resulting from both the aging of the facilities and the rapid population growth of Oconee County.

Applicable Elements: Population; Community Facilities; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Review and update Community Facilities Plan, amending to reflect impact of recent growth and development and needs of aging population.	Planning Commission; County Council	2013 No Community Facilities Plan exists
<ol> <li>Utilize Capital Improvements Plan to systematically construct and upgrade facilities</li> </ol>	Planning Commission; County Council	Ongoing No Community
identified in Community Facilities Plan.	-	Facilities Plan exists
3. Look for alternative to tax payer financing of projects such as private partnerships, user based fees, etc.	County Council	Ongoing No Community Facilities Plan

## Goal #5

## Expand appreciation for the arts, cultural heritage, significant natural features, and historic treasures in a manner that both enhances our lifestyle and promotes sustainable economic prosperity.

Objective 1: Promote a countywide arts program to facilitate an appreciation for the arts and other cultural facilities found within Oconee.

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Seek partnerships and other forms of assistance for the School District of Oconee County in supporting the arts.	Parks, Recreation, Tourism Commission; County Council	Ongoing
2. Support local festivals and entertainment events that promote the heritage of the region; this may include, but not be limited to, grants and other appropriate forms of financial assistance.	Parks, Recreation, Tourism Commission; County Council	Ongoing County holds a number of events
3. Seek to expand role of the Oconee County Heritage Museum in documentation and preservation of local cultural and historical treasures; this may include, but not be limited to, funding of facility upgrades, establishment of various programs and partnerships aimed at promoting specific resources, and addition of staff positions.	Parks, Recreation, Tourism Commission; County Council	Ongoing \$30k per year and an employee. Solicitation of donations and artifacts.
4. Support high quality library facilities, programs, and services that enhance, enrich, entertain, and educate our diverse and growing population and present opportunities for life-long learning and the exchange of culture	Library Board County Council School District	Ongoing

Applicable Elements: Population; Cultural; Community Facilities; Priority Investment

# Objective 2: Conserve and protect features of significant local, regional and national interest, such as scenic highways, state parks, and historic sites and expand efforts to promote them for tourism.

Strategies for Success	Agencies Responsible	Timeframe for Completion & Notes
1. Seek to insure the preservation and protection of sites and facilities currently listed on historic registers in Oconee County; this may include, but is not limited to, the development of partnerships to assist in the purchase of development rights, and adoption of standards governing future alterations.	Parks, Recreation, Tourism Commission; Planning Commission; County Council	Ongoing Courthouse is on the National Registry
2. Study and identify any additional cultural and historic properties worthy of consideration on historic registers.	Parks, Recreation, Tourism Commission; Planning Commission; County Council	2012 Complete and Ongoing
3. Provide assistance to local historical and cultural groups in efforts to obtain funding to study, maintain and manage Oconee County historical sites.	County Council	Ongoing
4. Update and maintain GIS data and maps that can be printed and/or displayed on the county website, to provide the public with information on the location of historical and cultural sites.	Parks, Recreation, Tourism Commission; Planning Commission; County Council	2013 Complete
5. Provide appropriate financial and technical support to the development of the Southern Appalachian Farmstead Project currently underway in conjunction with the U.S. Forest Service and other governmental entities.	Parks, Recreation, Tourism Commission; County Council	2014 S.A.F.P no longer and entity
7. Review and adopt appropriate standards aimed at maintaining the state 'Scenic Highway' designation for SC Highway 11 and other routes; such standards may be based on adopted Scenic Hwy Corridor Plans or best practices, and may include the designation of the route as a County Scenic Highway.	County Scenic Highway Committee: Parks, Recreation, Tourism Commission; Planning Commission; County Council	2013 Complete
8. Review and update adopted regulations as needed to ensure all cultural, historical, and natural resources receive the protection necessary to remain a viable component of our lifestyle, as well as playing a role in an expanding tourism economic sector.	Parks, Recreation, Tourism Commission; Planning Commission; County Council	Ongoing

Applicable Elements: Natural Resources; Cultural; Land Use; Priority Investment



## **Population Element**

### Overview

This element examines the demographic and socioeconomic trends of Oconee County. Among the various factors considered are age, gender, race, educational

attainment, and income level. When appropriate these factors are compared to similar attributes from other counties of Upstate South Carolina. The latest data available at the time of writing was used in this examination. This element will also include projections of future trends and impacts, as well as statements of goals and policy recommendations based on the expressed wishes of the citizens of Oconee County.

Oconee County's population has continued to increase since the adoption of the 2010 update to the Comprehensive Plan. As a result, existing plans and strategies related to providing services for Oconee's citizens need to be evaluated in an ongoing manner to insure they adequately meet the needs of the growing population. The demand for services increases as the population grows. Proper planning for services and infrastructure helps to ensure that existing systems will not become stressed and ultimately see a decrease in quality and efficiency. Naturally, in a perfect world, funds used to provide and maintain services should increase at the same time to meet the demands of the population. In reality, however, we will have to do the best we can with what is available. Therefore, Oconee County will need to analyze and evaluate provided data to understand what the most pressing needs of the population are, and the services that they require, as well as find ways of doing more with what is available.

#### **Continued Changes**

By looking at the changes in demographic and social trends that have occurred in the past five or ten years we can assemble a picture of Oconee County's current population that will serve as a guide in making decisions to help make Oconee County a better place for all of its citizens. It should be noted, that much of the information used to create the picture is taken from the 2010 Census and from subsequent yearly estimates, as well as projections from various sources. Trends indicated by the last census and by updates, as well as significant increases in economic development and new residential construction appear to demonstrate that Oconee County's growth will continue into the foreseeable future.

One factor that influences issues related to the County's population is the number of residents who do not call Oconee County home, but may own land, have a second home (or 3rd or 4th); or that may be employed in the County, but live elsewhere. This category of individuals has, in one way or the other, a stake in the County, and places demands on services. As a result of the nature of development that occurs in Oconee County, particularly near the lakes, this category is of significant concern.

Therefore, even though the Census Bureau provides a reliable look at population as compared to other regions, it does not give a comprehensive picture of the way that population influences Oconee County. To compensate for this fact, as one examines the trends in population, they should keep in mind that

Oconee County has a significant group of individuals that, while their primary residence is elsewhere, is invested in the success of our area nonetheless.

#### **Population Trends and Components of Change**

The 2010 Census showed the population of Oconee County to be 74,273, a figure reflecting a trend of growth established decades earlier. See Table P-1, which also includes population updates for 2014 and 2016.

#### Table P-1

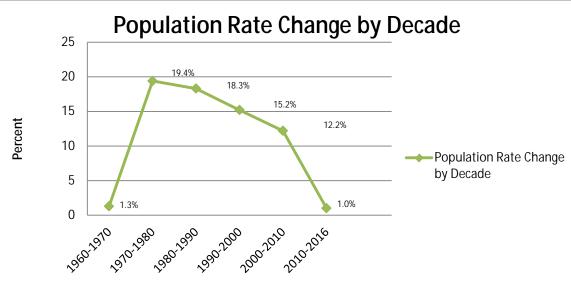
Oconee County Population 1960-2010							
1960	1970	1980	1990	2000	2010	2014	2015
40,204	40,728	48,611	57,494	66,215	74,273	75,192	76,600
Change in population:	+524	+7883	+8883	+8721	+8060	+828	+683
Change in population by percent:	+1.3%	+19.4% or 1.94% per year	+18.3% or 1.83% per year	+15.2% or 1.52% per year	+12.2% or 1.22% per year	+1.1% or .27% per year	+1% or .5% per year

Source: U.S. Census Bureau

During the more than half century covered by Table 1, Oconee's population grew by more than 88%. A close inspection of the data between 1960 and 1970, and data from previous decades, indicates the population typically increased by less than 5% per decade. It was only after 1970 that dramatic changes occurred, with the County's population growing an average of 16.27% every 10 years, during the next <del>3</del> 4 decades up to 2010.

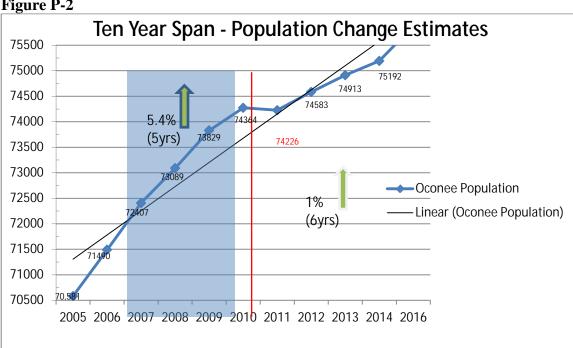
Figure P-1 graphically illustrates the county's rate of growth during- the latter part of the 20<sup>th</sup> century on into the 21<sup>st</sup> Century.





Source: U.S. Census Bureau

Oconee County's population continued to grow at a slower pace in the years between the 2010 Census and 2016. That leveling off may be attributed to the economic collapse of 2008, which devastated the real estate and job market on a national level. According to information from the ESRI Demographic and Comparison Profile, the estimated population of Oconee County in 2016 was 67,918, 75,875, reflecting an increase of between 2010 and 2016. Though low, a rate of 1.1% sets Oconee County on pace to nearly double the growth rate seen from 1960-1969, as illustrated in Figure P-1, above.



**Figure P-2** 

Source: U.S. Census Bureau

Estimates from the Census Bureau indicate that the population is continuing to increase. The graph titled "Ten Year Span – Population Change Estimates" (Figure P-2) shows that the population growth is increasing at a steady rate year after year, save a small dip in 2012. However, the rate is not on pace to reach the double-digit growth seen from the four decade span dating from 1970 up through 2009. At its peak, the County population increased at a count of nearly 900 people per year in the 1990's. It would take a significant increase annually for the remainder of the decade just to bring Oconee back into the double-digit (10%) growth category for the decade.

Oconee's population increase is a result of a number of factors, not the least of which is the continued national shift in population to the Coast and to the South. For many, as they get closer to retirement age, with children often living in other states, they begin to look at moving to a warmer climate where the cost of living is lower<sub>5</sub>. Computers and wireless technology have allowed retirees, "secondary home" owners from surrounding metro areas, and the like, to be connected to 'home' from hundreds or even thousands of miles away. This trend is expected to continue with the majority of growth in Oconee County resulting from the ever increasing retirement community moving to the area. Oconee County has a retiree presence that is 25% more per capita than the state of South Carolina average. It should also be noted that the economic recovery that is now underway nationwide has certainly found its way to Oconee County, as evidenced by projects and growth predictions through 2030. Population figures for the County from the S. C. Budget and Control Board, Office of Research and Statistics project a 2020 population of 82,300, a 9 percent increase over the decade, Furthermore, the projection out to 2030 predicts a population of 89,100. These figures predict an increase of 34.6 percent for the 30 year period from 2000 to 2030.

Another factor that is and will continue to influence the County is the central location of Oconee between Atlanta and Charlotte, along with the rapidly expanding metro area of Greenville-Spartanburg. These cities continue to see enormous growth up and down the I-85 Corridor. The time it takes to commute to Atlanta and Greenville is getting shorter. As these cities continue to grow outward in a sprawling manner, Oconee's beauty and quality of life receives more exposure in those areas due to a sustained marketing campaign and the closer proximity of this region to the suburban growth of these hub cities. What was once a certain two-hour drive to the metro areas can now-be done in as little as 45 minutes to an hour. Preparation and careful planning to meet the needs of an ever increasing and aging population will be vital to the health of the County as a whole.

#### **Regional Population Change**

Table P-2 compares Oconee County's change in population in the ten year period between 2005 and 2014 to rates experienced by various counties across upstate South Carolina.

1 able P-2							
Comparison of Population Change of Ten Year Period (2005-2014) in Selected South Carolina							
Counties							
County	Percent Change						
1 Greenville	22.0%						
2 Spartanburg	13.2%						
3 Pickens	12.9%						
4 Anderson	11.6%						
5 Oconee	9.1%						
6 Greenwood	6.2%						
7 Cherokee	4.1%*						
8 Union	1.0%*						
9 Laurens	-1.5%						
10 Abbeville	-2.3%*						
South Carolina	17.5%						

Table P-2

Source: U.S. Census Bureau (\*Denotes data only available from 2007-2014)

Table P-2 above indicates the population change for several Upstate counties between 2005 and 2014. Even with the population dip in 2010-2011, Oconee County continued to experience near double-digit growth numbers over a 10 year period (2005-2014). Table P-2 also reveals that Oconee County's growth rate during this period was actually 8.4 points below the state average. The largest percentage increase was in Greenville County at 22%. Oconee's growth, though not as drastic as in the previous ten year spans, was still strong at approximately 9.1 %.

#### **Components of Change**

Components of Population Change in Upstate South Carolina, 2010-2014										
County	Total Change	Number of Births	Number of Deaths	Total Natural Increase (Births + Deaths)	Percent of Total Change Due to Natural Increase (%)	Net Migration	Percent of Total Change Due to Migration			
Oconee	917	3364	3547	-183	16.6	1149	83.4			
Abbeville	-451	1093	1136	-43	9.5	-396	90.5			
Anderson	5687	9512	8353	1159	20.4	4380	79.6			
Cherokee	557	2873	2480	393	70.5	266	29.5			
Greenville	31,533	25,986	16,133	9,853	31.2	21,025	68.8			
Greenwood	-141	3817	2952	865	46.3	-1004	53.7			
Laurens	-6	3311	3316	-5	13.0	34	87.0			
Pickens	1142	5050	4607	443	38.8	650	61.2			
Spartanburg	9237	15234	11817	3417	37.0	5856	73.0			
Union	-1087	1291	1568	-277	25.5	-788	74.5			
South Carolina	207,081	244,058	182,009	62,049	30.0	139,545	70.0			

#### Table P-3

Source: U.S. Census Bureau

Table P-3 illustrates the components of the change in Oconee County's population between 2010 and 2014. By examining the rates of birth, death, and migration, it is possible to better identify the major factors driving population increases and decreases. Over the last 5 years, 6 of 10 of the Upstate Counties experienced growth overall. However, only one (Cherokee County) could credit this growth to total natural increase (births + deaths). While it is encouraging to see large numbers of people migrating to the area, it is important to foster a strong and sustaining community that can replenish its population base aside from migration. Of each of the counties that experienced positive growth, Oconee was the only county to not have more births than deaths. Contrarily, a large number of people chose to migrate to the Golden Corner from other areas, making up the difference.

In the five years between 2010 and 2015, the inflow of new residents from other areas accounted for more than 80% of Oconee County's population change. This places Oconee County at the top of the region in increase due to migration.

#### **Growth by Census Tract**

Because population density typically varies from area to area within any given county, the U.S. Census Bureau uses a system of dividing counties into statistical subdivisions, called census tracts. Generally, these tracts are areas that contain between 1,000 and 8,000 people; a tract containing 4,000 people is considered ideal. Over time, as population levels increase or decrease, tract boundaries are subject to

change, but because tract limits generally follow established features, such as major landmarks, geographic features, or political boundaries, most are considered stable features. Therefore, while tract boundaries may occasionally be adjusted to accommodate drastic population changes, most typically remain fixed for a number of counts. (U.S. Census Bureau)

### **Census Map**

Oconee County contains fourteen separate census tracts, each of which has a numerical designation between 301 and 311. Figure P-3 illustrates the location of these divisions.

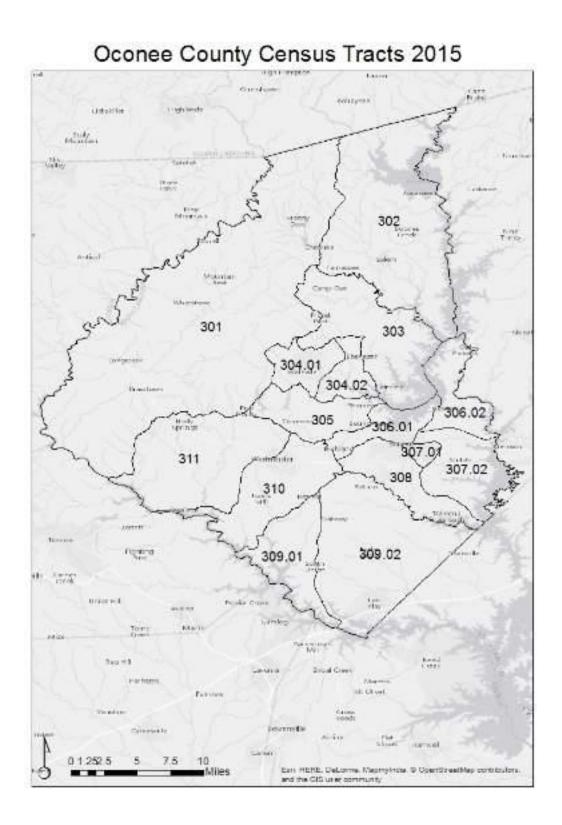
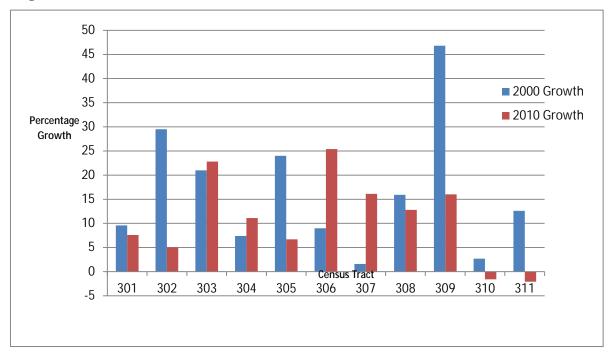


Figure P-4 illustrates the percentage of growth experienced by the areas within each census tract between 2000 and 2010.



#### Figure P-4

By examining the map in Figure P-3, and then looking over to the chart in Figure P-4 it is possible to better determine the geographic areas of the county that experienced the strongest growth between 2000 and 2010, as well as the decade 1990-2000. For example, Tract 306, experienced the most intense growth at, 25.4%, likely due to the proximity of Seneca and Clemson, and the obvious attraction of Lake Keowee. The next highest level of growth was seen in Tract 303, at 22.8% growth, which is the area that is sandwiched between Walhalla and West Union to the south, and Salem to the north. It is also bordered to the east by Lake Keowee. This area is particularly attractive to retirees from other regions, with many having chosen Lake Keowee as the site of their "dream home". The 303 tract was also the most consistent growth wise in both decades shown. Tract 303 was the only tract to show growth of more than 20% for both decades. Tracts 310 and 311, located around the city of Westminster, both experienced decline in the decade 2000 to 2010.

#### **Projected Growth in Oconee County**

Table P-4 projects Oconee County's future population based on the rates experienced between 2000 and 2010. It must be stressed that this table was constructed by the Oconee County Community Development Department to illustrate approximate population levels *if earlier trends continue at the rates experienced between 2000 and 2010. As noted previously other projection methodology reflected in the 2016 Oconee County Trends Report prepared by the Oconee Economic Alliance predicts a smaller population increase to 89,100 in the year 2030.* 

#### Table P-4

Рој	Population Projections Based on Rates Experienced Between 2000 and 2010									
Census Tract	2010 Pop.	Growth Rate % (2000-2010)	Previous Projection for 2010 Pop.	Difference from Projection (Total - %)	Projected 2020 Population	Projected 2030 Population				
301	4352	7.6	4434	-82	4683	5039				
302	5764	5.0	7120	-1356	6052	6354				
303	6145	22.8	6056	+89	7546	9266				
304	8768	11.1	8476	+292	9741	10,813				
305	4375	6.7	5085	-710	4668	4980				
306	8890	25.4	7726	+1164	11,148	13,980				
307	9819	16.1	8589	+1230	11,400	13,235				
308	7214	12.8	7412	-198	8137	9178				
309	9980	16.0	12,628	-2648	11,577	13,429				
310	5267	-1.6	5499	-232	5183	5100				
311	3699	-2.1	4256	-557	3621	3544				
County Total	74,273	12.17%	77,281	-3,008 -	83,756	94,918				

Source: U.S. Census Bureau

Extending the growth rate illustrated in Table P-4 shows that, without significant change in rates, Oconee County's population will not quite exceed 100,000 by the year 2030. It should be noted, however, that some state sources project Oconee County's rate of growth to slow from the 12.2% seen in the last census period, to 6.2% between 2010 and 2020; with a return to double-digit growth at roughly 13% between 2020 and 2030.

Projecting from the first four years available at the time of this update, (at a yearly average rate of 1.1% or 11% over a decade) Oconee County's population is on pace to be 82,443 by the 2020 census.

#### **Long Term Population Projections**

Although the accuracy of projections tend to decrease as time intervals increase, the general trends are worth considering. Oconee's population is expected to increase by as much as 25% by 2030. If these estimations hold true, population growth will have a dramatic impact on Oconee's way of life. Such things as travel time to work will increase due to traffic congestion, while the open space that most now take for granted will significantly decrease. To avoid such outcomes, we need to be considering now how we can guide population growth in a manner that increases the effectiveness of the already existing infrastructure. Because it will be demanded by the growth, where should new infrastructure be located? How can we best exploit our "advantages" in expanding our economic prosperity? And, as this is an issue

increasingly at the forefront of most land use discussions, are there areas of the County too special to be developed? These questions, and many others like them, require citizens to take part and help guide the development of any rules and standards necessary to achieve the balance desired by all.

#### **Population Density**

Density, for our purposes, is an objective measurement of the number of people within a given geographic area. Based on the latest estimates, the current population density of Oconee County is approximately 105 persons per square mile. However, it should be noted that the County is blessed with an abundance of national forest land, an abundance of lakes, and an increasing number of areas set aside for conservation. As a result, the basic population density statistic does not take into account the portion of the County that is not available for development.

Being almost directly in the very center of the I-85 Corridor (roughly 600 mile stretch of focused economic commerce along Interstate Highway from Montgomery, AL to Durham, NC) Oconee County finds itself in nicely situated to reap the suppliers and multipliers found in one of the fastest developing highly industrial "micropolitan" regions in the country. Development moves out toward areas with cheaper land prices, resulting in the sprawl of people from the cities outward, until the metropolitan areas begin to merge forming a larger megalopolis. In our case, many people believe it will only be a matter of time until "Atlanta meets Greenville", possibly here in Oconee County.

In 2007, the U.S. Census Bureau issued new Metropolitan Statistical Area (MSA) Maps that showed Oconee County as a 'micropolitan', an area with an urban cluster of at least 10,000 persons. Figure P-5 (below) is a portion of the latest (2013) MSA map.



The population growth resulting from the continual sprawl of cities is typically different than that which we have been experiencing to date in the County. Generally, the majority of the growth up until now has been driven by retirees drawn to Lakes Hartwell and Keowee. Growth from cities, on the other hand, typically consists of those families with the economic means to move away from the congestion of city life, to an area with a more rural quality, with reasonable commutes, and a less expensive cost of living.

#### Figure P-5

Along with this type of growth comes an increase in demand for services focused on the young, such as schools and recreation. If so, with the main focus of retirees remaining near the lakes (primarily Lake Keowee), and the metropolitan sprawl establishing itself on the less expensive lands in the southern end of the County, it is quite possible that over time we will see a geographic segregation of population and their associated needs. More recently, the southern end of the County has begun to see increased interest from industry and developers due to infrastructure improvements (i.e. sewer lines) and a County industrial park (Golden Corner Commerce Park). Along with three exits or access points to Interstate 85, the area is primed for significant development. This reality has led to an increased awareness by the community and the County of the need for planning and preservation of the area and it's rural character

#### **Gender Division in Oconee County's Population**

The gender division of Oconee County's population is approximately the same as that reported for the United States as a whole, with approximately 51% of the County's residents being female, and approximately 49% male. This was the case for the 2010 Census as well as the 2014 estimates. Interestingly, however, the gender division of the population found in the various municipalities varies by as much as several percentage points. In 2010, Walhalla had almost 50% more females than males. As of the 2014 estimates, there are still 20% more females than males within Walhalla city limits, similar to Seneca which had 19% more females in both 2010 and 2014 numbers. See Table P-5 (below).

Gender in Oconee Municipalities in 2010/2014									
Municipality	Male	Male 2010		Female 2010		Male 2014		Female 2014	
Municipality	Total	%	Total	%	Total	%	Total	%	
Salem	106	54%	91	46%	67	53%	59	47%	
Seneca	3706	46%	4318	54%	3719	46%	4428	54%	
Walhalla	1712	41%	2484	59%	1919	45%	2312	55%	
West Union	163	57%	123	43%	162	50%	159	50%	
Westminster	1113	47%	1257	53%	1222	48%	1317	52%	
Oconee (total)	35,967	49%	37,068	51%	36,772	49%	37,884	51%	

Table P-5

Source: U.S. Census Bureau

#### Age Ranges in Oconee County's Population

The median age of Oconee's population (the age at which half of the population is older and half is younger) is increasing. This is consistent with a nationwide trend reflecting the impact of the aging of the "baby boomers" born in the years following World War II (between 1946 and 1964). In fact, the 2010 Census revealed that the median age of the United States is the highest that it has ever been, rising 1.9 years over the previous decade to 37.2 years of age. The median age of Oconee's population, however, surpasses this, rising from 39.5 years in 2000 to 43.4 years in 2010. This change was perhaps spurred on in large part by a combination of the influx of retirees from other regions, and the effects of the overall improvements in health care, nutrition and working conditions enjoyed by "transplants" and natives alike.

The number of "senior citizens" residing in Oconee County has dramatically increased during the last several decades. In fact, the number of Oconee residents over 65 years of age increased over 250% between 1950 and 1990. By the time of the 2010 Census, this group accounted for 13,219 Oconee County residents, or 18.1% of the total population. At the same time, in the neighboring counties of Anderson, Greenville, and Pickens, those 65 years and older represented 16.1%, 13.5%, and 14.3%, respectively; and statewide the same age group represented only 14.7%. This strong, continued shift toward an aging population in Oconee County becomes even more obvious when looking at historical trends, particularly in the older age groups. In 1950, there were only 77 Oconee residents over 85 years of age. By 2010, the number had grown to 1241 and 1,269 according to 2014 estimates. (Source: U.S. Census Bureau; South Carolina Office of Research and Statistics)

Table P-6 (below) presents a profile of various age groups in Oconee County. Please note that data for some groups was unavailable.

Profile of Age Groups in Oconee County in 2000 and 2010								
	-	00		10	Percent Change			
Age Group (years)	Number	Percent of Population	Number	Percent of Population	from 2000			
Under 5	3996	6.0	4168	5.6	-0.4			
5-9	4247	6.4	4240	5.7	-0.7			
10-14	4338	6.6	4498	6.1	-0.5			
15-19	4090	6.2	4798	6.5	0.3			
20-24	3752	5.7	4228	5.7	SAME			
25-29	4188	6.3	3826	5.2	-1.1			
30-34	4299	6.5	3903	5.3	-1.2			
35-39	4684	7.1	4390	5.9	-1.2			
40-44	4941	7.5	4566	6.1	-1.4			
45-49	4741	7.2	5079	6.8	-0.4			
50-54	4569	6.9	5556	7.5	0.6			
55-59	4254	6.4	5327	7.2	0.8			
60-64	3805	5.7	5588	7.5	0.8			
65-69	3570	5.4	4828	6.5	1.1			
70-74	2667	4.0	3619	4.9	0.9			
75-79	2005	3.0	2760	3.7	0.7			
80-84	1220	1.8	1604	2.2	0.4			
85 and over	849	1.3	1295	1.8	0.5			
Total population	66,215	100	74,273	100				

Table P-6

Table P-6 shows that in 2000, nearly half (47.9) of the population of Oconee County could be accounted for between the ages of 25 to 59, a three and a half decade span. Ten years later, in 2010, the age group from 35 to 69 represented nearly 50% (47.5) of the County's population. The seemingly evident correlation likely means that the County is literally getting older. Young adults are not replenishing the

population. Another way to look at it is that the largest five year age group in 2000 was the 40 to 44 year group. 10 years later, it was 10 years older at the 50 to 54 year group The table also shows that those age groups 45 50 years and older in each instance saw increases in their portion of the population. Whereas, for age groups under 50 years old (ten groups), only one (15-19, 0.3%) could account for any increase in their portion of the population. It is certainly plausible to conclude that the County's population is "growing older". The number of citizens 65 years and older living in Oconee County's municipalities is shown in Table P-7.

Citizens 65 and Older in Oconee County Municipalities in 2010								
Municipality	Total Population	Number of Individuals 65 and Older	Percent of Total Population 65 and Older 2010	Percent of Total Population 65 and Older 2000				
Salem	126	28	22.2	22.2				
Seneca	8147	1483	18.2	16.0				
Walhalla	4231	634	15.0	15.7				
Westminster	2539	487	19.2	15.3				
West Union	321	56	17.4	16.5				
Oconee County	73,035	13,219	18.1	15.6				

Table P-7 reveals that only 20.3% (2688 out of 13,219) of Oconee County residents 65 years and older live in a municipality. While the population of those people 65 and older increased overall in municipalities, from 2000, the percentage dropped more than 2%.

#### **Racial Composition of Oconee County's Population**

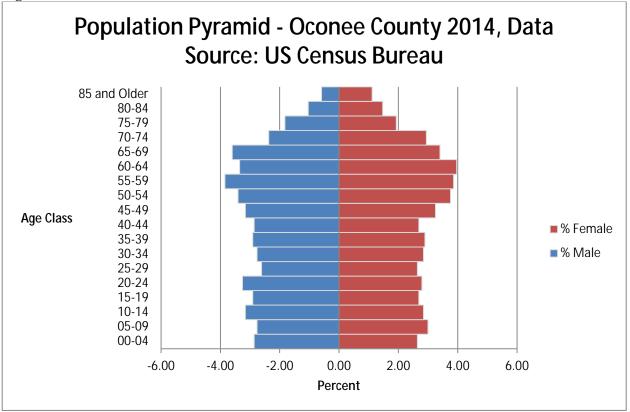
Table P-8 (below) illustrates the racial makeup of Oconee County's population.

Racial Composition of Oconee County's Population in 2010									
Area (Census Tract)	Total Pop.	Single Race Pop.	*White	*Black	*American Indian/ Alaskan	*Asian	Pacific Islander	*Other	Multi- Race Population
301	3923	3871	3837	0	0	0	0	34	52
302	6319	6283	6262	0	21	0	0	0	36
303	6409	6301	6255	39	0	0	0	7	108
304.01	6841	6718	5801	590	22	0	0	305	123
304.02	1548	1548	1548	0	0	0	0	0	0
305	4621	4515	4392	47	0	0	0	76	106
306.01	3755	3672	3576	84	12	0	0	0	83
306.02	3943	3922	3457	314	0	151	0	0	21
307.01	3754	3720	2383	1316	21	0	0	0	34
307.02	5806	5751	4479	1153	32	87	0	0	55
308	7104	7097	5223	1622	0	74	0	178	7
309.01	2696	2696	2655	0	0	41	0	0	0
309.02	7422	2272	6945	306	21	0	0	0	150
310	5075	5001	4686	270	0	0	0	45	74
311	3819	3806	3751	55	0	0	0	0	13
<b>Total County</b>	73,035	72,173 / 98.8	66,250 / 90.7	5796 / 7.9	129 / <1.0	353 / < 1.0	0	645 / < 1.0	862 / 1.2

Table P-8

Table P-7

Table P-8 shows that while 90.7% percent of Oconeeans were counted in the white racial group in the 2010 Census (increase from 89.1% in 2000), statewide the percentage is still much lower at just over 67%. Almost all non-white racial groups' population decreased in Oconee County during the census period on a per-capita. The only exception noted was a roughly 60% increase in the percentage of Asian population, which increased to 8.4 to a little over 1%. Another aspect of population growth that typically provides insight for decision makers is the breakdown of population by age. If, for example, a large segment of toddlers will be moving though the educational system over the next few years, consideration of the adequacy of facilities to handle the increase in students or additional early childhood programs may be in order. On the other hand, if the number of toddlers is decreasing, officials need to be looking toward the reallocation of funds to other areas. One of the best ways of examining the population is to look at a population pyramid, which depicts the age structure of the region. Oconee's population pyramid is ballooning, typical of most places in the post-industrialized world. See Figure P-6 (below).



Source: U.S. Census Bureau

One of the more noteworthy aspects of Figure P-6 is that the largest segment of the population is over fifty-five years of age, typically the age range when the individuals have started to reach the top of their earning potential and beginning to think about retirement. In addition, the pyramid is relatively top heavy large, with the bottom relatively small. This means that the number of young people coming into the workforce will continue to be smaller than the number of people retiring<del>;</del>. Under existing systems of social security and other similar programs, the burden of supporting more and more people will be placed on the shrinking younger workforce. Typically, one finds population decreasing rapidly in the upper age

categories; however, with the current life expectancy in the United States at 78.8 (according to the government agency, the Center for Disease Control, the leading national public health institute of the United States) years of age, the percentage of people 75 and older is increasing. This trend is expected to continue. This means two things for Oconee County: one,-services to the elderly population will last longer and as a result cost more; two, Oconee County has a unique opportunity with its natural assets and low cost of living to increase its capacity to cater to an ever growing and lucrative market for retiree services. Oconee should continue to plan for incentivizing the growth of the types of resources necessary to better enhance its service and retirement economies, thereby increasing opportunities for young entrepreneurs and job seekers. Gigabit internet services are created in some municipalities to help support and recruit tech industry. The County should look at capitalizing on infrastructure that does the same for the retiree economy, in addition to the agricultural, industrial, and tourism economies.

A 2012 finding from the Federal Interagency Forum found that the number of senior citizens living in poverty declined from 15 percent to 9 percent since the mid-1970s. Additionally, the proportion of older Americans enjoying a "high income" increased from 18 to 31 percent. This population segment is increasingly wealthier, meaning more expendable means with which to spur the economy in which they live. Retirees also benefit communities with many hours of volunteer and part time work among other things. Oconee is the 4<sup>th</sup> oldest county in South Carolina, behind McCormick (51), Georgetown (47), and Calhoun (45) counties. Table P-9 (below) shows how Oconee compares with some of its neighboring counties.

County	Median Age
Anderson	40.3
Greenville	37.6
Habersham (GA)	38.9
Jackson (NC)	36.2
Macon (NC)	48.6
Oconee	43.8
Pickens	35.2
Raburn (GA)	47.3
Stephens (GA)	40.9
Transylvania (NC)	49.9

Table P-9

*Green* = *South Carolina counties* 

Being one of the most aged counties in the state, and the oldest in the Upstate, has a variety of implications. Most notably, an older population will need to have greater access to medical services and assisted living, particularly as many persons retiring and moving to the area do not bring their family with them. Other impacts, though not as apparent on the surface, also have a tremendous effect on many aspects of life in Oconee County. One of these is the fact that a large, well-educated retired population with sufficient income brings significant political pressure on local government. Currently, Oconee County has several active political and conservation organizations made up of many members of this age group. Their ideals and beliefs have already begun to impact political decisions, and will likely continue to do so in the coming years.

#### **Education in Oconee County**

In 2015, the School District of Oconee County operated 21 schools that served approximately 10,525 students. Among these facilities were 11 elementary schools, 3 middle schools, and 4 high schools, as well as an alternative school, an adult education facility, and a career center. Supporting the schools were 997 teachers, and over 600 classified employees, which included classroom aides, maintenance and grounds personnel, and clerical and transportation workers. The student teacher ratios at the various school levels were as follows:

<b>Elementary School-</b>	14:1
Middle School-	14:1
High School-	15:1

Sixty four percent (64%) of all professional employees possessed Master's Degrees or higher. (Source: School District of Oconee County)

Table P-10 (below) compares the average Scholastic Assessment Test (SAT) scores of the 205 Oconee County high school students that took the test in 2015 with state and national averages.

#### Table P-10

SAT Performance						
Critical Reading Math Writing Composite						
Oconee	508	508	482	1498		
South Carolina	488	490	465	1443		
National	497	513	487	1497		

Oconee County students surpassed the state SAT averages and virtually mirrored the national averages in 2015.

#### **Overall Educational Attainment of Oconee County's Population**

According to information from the South Carolina Office of Research and Statistics, 16% of Oconee adults older than 25 years of age had less than a 9th grade education in 2010. In addition, another 15% of this age group had attended high school but failed to attain a diploma. Of the rest of those 25 years of age and up, 16.2% had some college; 6.3% had an Associate's Degree; 11.0% had a Bachelor's Degree; and 7.1% had a graduate or professional degree. Table P-11 (below) compares Oconee County high school enrollment information that from other nearby South Carolina counties.

High School Attendance Data from Upstate South Carolina Counties: 2012-2013							
	Total	Dropouts (Grades 9-12) Graduates (Spring 2013)			g 2013)		
County	Enrollment (Grades 9-12)	Number	Percent	Number	% Entering Postsecondary	% Entering Gainful Employ.	% Joining Armed Forces
Oconee	3017	118	3.9	675	73.2	14.5	5.5
Abbeville	873	26	3.0	125	88.0	4.8	6.4
Anderson	9097	199	2.2	1888	68.6	11.7	3.4
Cherokee	2515	56	2.2	512	77.1	9.2	2.0
Greenville	21,265	590	2.8	3712	79.5	10.2	2.7
Greenwood	3354	79	2.4	460	60.2	17.6	2.0
Laurens	2486	86	3.5	196	75.5	19.9	1.5
Pickens	4858	192	4.0	818	71.1	13.9	3.4
Spartanburg	13576	302	2.2	2798	73.2	11.2	2.9
Union	1205	33	2.7	216	68.1	0.0	1.4

\*Although a majority of schools in each County provided records, information was unavailable for some schools.

Table P-11 also shows that in 2013, only one other regional county (Pickens, 4.0%) had a higher dropout rate than Oconee (3.9%). Three counties were tied at 2.2% dropout rates (Anderson, Cherokee, and Spartanburg). Oconee County tied with Spartanburg County for 5th place in the region with 73.2% of high school graduates entering some form of post-secondary education program. Interestingly, in 1999, Oconee would have been second at that rate. This is an indication of the increase in availability for postsecondary education in the last 15 years in addition to the need for some sort of technical degree for many industrial jobs. Oconee County students surpassed- the state SAT averages and virtually mirrored the national averages in 2015.

Finally, of the remaining graduates in 2013, Oconee County ranked second highest in the number of students joining some branch of the Armed Forces at 5.5%.

#### **Income in Oconee County**

Table P-12 (below) illustrates the rise of per capita personal income in Oconee County since 1980.

1 able 1 -12					
Per Capita Personal Income in Oconee County: 1990-2010					
Year	Per Capita	State Rank	Percent of	Percent of State	
	Income (\$)		National Average	Average	
1990	16,508	8	84	103	
2000	24,978	7	84	103	
2010	24,055	10	88	103	

Tal	ble	P-1	2

Though the income amounts are not adjusted for inflation, the table clearly shows that Oconee County students surpassed- the state SAT averages and virtually mirrored the national averages in 2015.

#### **Retirement Income**

Because Oconee County is home to a growing population of retirees, Social Security benefits and pensions are increasingly important to Oconee County's economic standing. Table P-13 (below) illustrates the percentage of Oconee's population receiving retirement benefits from Social Security, and the way that this compares to the rest of upstate South Carolina.

Retired Workers Receiving Social Security Benefits in Upstate South Carolina						
	2014			1999		
County	Population Number Percent of		Percent of	Percent of	Percent	
		Receiving	Total	Total	Change from	
		Benefits	Population	Population	1999 to 2013	
Oconee	74,656	14,915	20.0	14.0	43%	
Abbeville	25,100	4135	16.5	12.0	38%	
Anderson	189,763	30,675	16.2	12.2	33%	
Cherokee	55,707	7875	14.1	10.5	34%	
Greenville	467,087	62,255	13.3	10.0	33%	
Greenwood	69,708	10,850	15.6	12.5	25%	
Laurens	66,390	10,470	15.8	10.5	50%	
Pickens	119,577	17,110	14.3	10.2	40%	
Spartanburg	288,728	40,315	14.0	10.6	32%	
Union	28,329	4770	17.0	13.6	25%	

Table P-13	
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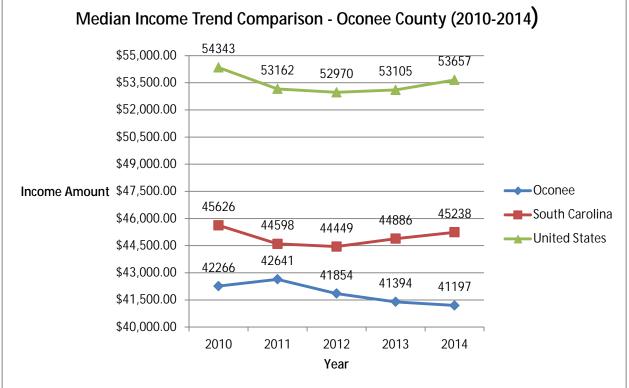
Oconee County continues to lead the upstate with 20% of its citizens receiving Social Security benefits as retired workers, while percentages in adjoining counties Pickens and Anderson trailed behind at 14.3% and 16.2%, respectively. Oconee County's percentage is also significantly higher than the state average (9.9 14.4%). Overall, the Upstate has seen large double digit increases in retirees receiving Social Security since the turn of the century with the average increase per county being 35%. The average total "Percent of Total Population" being retired receiving benefits for each county increased from 11.6% in 1999 to 15.7% in 2014. This is consistent with projections based on the "Baby Boomers" generation reaching retirement and a longer life expectancy in general, nationally. In the Upstate, 15.34 percent of its more than 1.3 million people are retired and receiving Social Security.

#### **Median Income**

Median income figures divide a population into two categories, one with an income below that of the median figure and one group with income above the median figure. Generally, the median income is considered a better measurement of wealth in a region than a simple average because it is less susceptible to extreme numbers on either end of the spectrum. The higher the median income is in an area, the greater the presence of wealth throughout the region. With that said, having a high median income figure in an area does not exclude the area from pockets of poverty and economic distress. The Chart below (Figure P-10) shows the changes in median income of Oconee County since the 2010 Census. The median income peeked in 2011 and has steadily declined since. Comparing with state and national averages, Oconee is more than \$12,000 below the national average and more than \$4000 below the state in median household

income; and the gap is currently widening with Oconee on a downward trend. Both the United States and South Carolina have been seeing yearly increases since 2013.





Source: U.S. Census Bureau

#### **Poverty Rate in Oconee County**

According to the South Carolina Office of Research and Statistics, Oconee County's poverty rate in 1979 (family of four persons earning less than \$7,412) ranked 3rd highest in the upstate, with 14.0% of its residents falling below the poverty line. By 1989, however, the number of Oconeeans living below the poverty line (family of four persons earning less than \$12,674) had significantly decreased, for the County's 11.4% rate was second lowest in the region, trailing only Greenville County. In fact, Oconee County was one of only four upstate counties that experienced a decrease in its poverty rate during the period. This decline continued throughout the next decade Information from the Appalachian Regional Commission showed that Oconee County's poverty rate in 2000 (family of four persons earning less than \$17,603) had fallen to 10.8%, again only second to Greenville County's rate (10.5%). In 2010, Oconee's poverty rate jumped to 16.6%. Estimates from 2014 show another increase, to 18.8%, as shown in the table below.

Upstate Poverty Rate Rankings				
County	Rate 2010	County	Rate 2014	
1. Greenville	14.1	1. Greenville	15.8	
2. Spartanburg	14.8	2. Anderson	16.8	
3. Anderson	15.8	3. Spartanburg	18.3	
4. Oconee	16.6	4. Oconee	18.8	
tie. Pickens	16.6	5. Union	19.0	
6. Greenwood	17.6	6. Pickens	19.4	
7. Laurens	19.2	7. Laurens	21.0	
8. Cherokee	19.5	8. Abbeville	23.1	
9. Union	20.1	9. Cherokee	23.5	
10. Abbeville	20.7	10. Greenwood	24.5	
South Carolina	16.4	South Carolina	18.3	
United States	13.8	United States	15.6	

#### Table P-14

Only one county (Union) saw a decrease in poverty, equal to a 5% total decrease. The average poverty rate for the Upstate Counties was 20 percent in 2014, equivalent to nearly 10 percent more poverty than the rest of the state. Compared to the national average, the Upstate is 28% more impoverished than the rest of the country. Oconee has had the fourth lowest rate in the Upstate in both 2010 and 2014; even with a 13.25 percent increase in poverty. Greenwood County saw the biggest increase per capita in poverty: a 39% jump explained their change in the rankings from middle of the pack to dead last with nearly 1 in 4 residents below the poverty line. Almost one in five Oconee County citizens live below the poverty line. This corresponds with earlier references to a continued decrease in median income in Oconee County.

#### Analysis

Both positive and negative changes have resulted from the strong growth in population experienced by Oconee County over the last several decades. Some of these changes are no different from those experienced all across the South; others, however, are unique to Oconee. The in-migration from other areas of the country, for example, is being seen throughout much of the southern United States as the "sunbelt" economy has expanded. Indeed, a significant portion of Oconee County's increase in population has apparently stemmed from this migration. Not all of those coming to the County, however, have been drawn by the relocated industry and commercial activity.

To uncover the factors that initiated much of Oconee's surge in population growth, it is necessary to look at what was occurring in the County at the time the changes began. As this element has shown, Oconee County's population "boom" began in earnest during the 1970's. At the time, Oconee and neighboring counties were undergoing dramatic economic changes, for the textile industry, after many decades of dominating the local employment scene, was beginning to wane. In addition, family farms, having traditionally played a vital role in the local economy, began to disappear at an increasing rate. As a result, a new attitude toward the recruitment of business began to take hold on both the state and local level. The active pursuit of economic development began to be taken seriously.

Oconee County, with its mild climate, pristine natural resources, and hard-working population, soon began to enjoy the benefits of these efforts. Increasingly, newcomers began to call Oconee home. Along with the new business and industry locating in and around the area came individuals seeking to take advantage of the growing economy. In addition, it was also during this period that one of the most significant economic events in the history of Oconee County took place. The Duke Power Corporation, seeking to expand their electrical generating capacity, made a decision that eventually led to the investment of billions of dollars in the County. The lakes and electrical generating facilities that resulted from this decision forever changed Oconee, bringing jobs and opportunities that otherwise would not have been available. Now, more than ever before, Oconee became a magnet for not only jobseekers, but also those that had finished their careers.

The Duke Power Project, unlike the Corps of Engineers' project that resulted in the creation of Lake Hartwell in the early 1960's, significantly altered the economic course of Oconee County. Not only was the construction project a boon to the local economy, but, once completed, the new facilities provided a tremendous increase to the local tax base. As the lakes developed, thousands of people and millions of dollars were drawn into the region. This single decision, therefore, not only initiated significant development, but also acted as a catalyst that sparked the ancillary growth of talent and wealth from across the nation. As a result, the lives of all but very few Oconee County residents have been significantly impacted by the changes from this period. The development of the lakes has in turn brought new residents to the area and increased volunteerism in the schools, hospital, and civic organizations. Oconee's population has grown by 88% since 1969, outpacing the U.S. average of 58.4%, almost doubling its population. Interestingly, the population shift share (a standard regional analysis used to determine growth in a given sector, in this case population) from Oconee to South Carolina was 0%. This means Oconee County shared an identical portion of the state population (1.56%) in 2014 as it did in 1969; this despite almost doubling its population. This is because Oconee had an identical growth rate with the state (88%).

Of course, not all of the changes have been positive. Perhaps the most obvious problems arising from a dramatic increase in population are associated with population density and overcrowding. Formerly plentiful resources are suddenly overwhelmed, and those that are of sufficient quantity suffer in quality. Pollution from increased traffic, litter, sewage, noise, lights, and any number of other sources drastically increases as people are forced closer together. Incompatible land use, an issue that was practically unheard of a few decades ago, has become a daily complaint. Long-time residents, looking for an explanation for the apparently new issues plaguing them, blame the newcomers. The new residents, suddenly realizing that life in their new home comes with unexpected problems, blame the "locals" for not having regulated the County better. "Us versus Them", therefore, is a population issue that must be dealt with in an on-going manner if the bigger problems are to be successfully mitigated.

There is also the looming issue of a different type of growth that may become apparent in the next few years, for already, there are signs that the metropolitan areas to the north and south are converging on <del>our</del> the area. A number of people live in Oconee County and work within the boundaries of the Atlanta metropolitan area. Due to our relatively low taxes, abundant acreage, and rural lifestyle, we should expect

to attract attention from a number of developers seeking to create large numbers of homes for those seeking to escape the sprawling urban areas. Such has been the case with many other rural counties that found themselves adjacent to fast growing metro regions. Soon, of course, such formerly rural areas themselves became part of the urban landscape. If we are to avoid such a fate, we need to realize that this is a real potentiality, and begin to take steps to manage the coming changes in a way that we wish to be. Population estimates show that the number of Oconee residents will continue to grow for many years to come. Along with this growth comes many opportunities; and with the proper attention by its leaders, future life in Oconee could be without compare.

Reasonable, well-planned development that complements the area's precious natural resources will accentuate the County's growing prosperity. A successful economic development program will provide Oconee's residents with steady, high-paying jobs, maintaining the trend of a strong local economy. Still, even under the best of conditions, some problems will arise, but those problems stemming from population growth can be overcome. Thoughtful, adequate regulations that not only address each of the issues, but also preempt the future problems, are therefore not only desirable, but necessary.

Future issues requiring local government attention will include matters not even considered an Oconee County problem a few years ago. As Oconee's population gets older, for example, issues affecting the elderly will have to be dealt with by the local governments, for not every need will be met by state and federal actions. In addition, the increasing number of foreign-born individuals living in Oconee, both aliens and citizens, will raise the possibility of cultural and ideological friction. As Oconee County's economy moves forward into the new century, efforts will need to be made to insure that every citizen has the opportunity to move forward with it. As high-tech industries assume the dominant workforce position formerly held by the textile industry, for example, those individuals unprepared to deal with the new world will be left behind, increasing the burden on the rest of the population.

As this element shows, the population of Oconee County faces a bright future, but there is work to be done. The job will require close attention to issues before they develop into major problems. There is no doubt that dealing with the issues will sometimes be unpleasant, but, by utilizing the tools and resources available in Oconee County, the benefits will outweigh the objectionable moments and provide Oconee's residents with a bright future.

#### Population Objectives for the Future

The following objectives are intended to address those needs and desires established within the Population Element. See the 'Goals' section of this plan for specific strategies and timelines for implementation.

1. Initiate efforts to develop the foundation of a county stormwater management program prior to federal mandates, thereby allowing for the most efficient and cost-effective implementation possible in the event of designation.

2. Establish a program of managing both water quantity and water quality throughout the county that will ensure efficient utilization, and appropriate conservation, of our greatest natural resource.

3. Continue support of a comprehensive planning process so as to insure that the citizens of Oconee County possess accurate inventories and analyses of existing county conditions, and the opportunity to better manage anticipated future conditions.

4. Develop and implement an effective Capital Projects Program that provides the highest level of service and facilities for Oconee County's citizens.

5. Create and/or update plans for specific priorities.

6. Complete and properly maintain Oconee County's Geographic Information System (GIS).

7. Continue to actively promote the recruitment of employment opportunities that provide the best lifestyle for all Oconee residents.

8. Encourage development in a way that protects and preserves our natural resources.

9. Manage development in a manner that ensures our natural resources and lifestyle enhance sustainable economic growth and job opportunities.

10. Promote and enhance access to affordable housing through both public and private cooperation.

11. Work to address the age-related problems that may arise among Oconee County's aging population, particularly focusing on issues not adequately dealt with by state and federal efforts.

12. Continue to evaluate and fund public transportation in urbanizing areas of Oconee County, expanding as needed to provide for ongoing growth and development.

13. Establish programs to review all existing community facilities to determine needed changes resulting from both the aging of the facilities and the rapid population growth of Oconee County.

14. Promote a countywide arts program to facilitate an appreciation for the arts and other cultural facilities found within Oconee.



## Natural Resources Element

#### **Overview**

This element examines Oconee County's natural resources, providing both an inventory and analysis of the benefits derived from various features. Among the resources considered are soils, including topographical characteristics; plants, animals, and their habitats; hydrology; unique recreational opportunities; and other natural assets impacting modern Oconee County. The results of the assessment will be used to project future trends and needs, which will in turn be addressed in goals and policy recommendations based on the expressed wishes of the citizens of Oconee County.

Since the adoption of the 2004 Comprehensive Plan, the County has continued to work toward sustainability so that our valuable resources are maintained for years to come. Citizens have, also become organized in speaking out about the need to protect Oconee's environmental resources. One of the major success stories of the past few years was the conservation of Stumphouse Mountain. Further, efforts have been made to protect water quality, green space, and farmland. One of the most significant problems we have faced over the past five years has been the ongoing drought that has significantly degraded the County's lakes and water resources.

Natural resources are important to the continued economic vitality of the county. As stated in the Population Element update, the County is experiencing approximately a 6.9% population growth. Increasing population strains the natural resources of an area by increasing the use and intensity of that use. The essay, "Tragedy of the Commons", by Garrett Hardin comes to mind when we begin to think about protecting and enhancing our natural resources. We must strive to answer the question of the "commons" – what can be done to ensure that future persons are able to enjoy and utilize the resources we have been blessed with. Failing to answer questions like this and failure to take action will result in a tragedy. Our natural resources will one day become so degraded that future generations are unable to use or enjoy them.

### **Defining Oconee County**

Section 4-3-420 of the South Carolina State Code of Laws (2000) states: Oconee County is bounded as follows: on the north by the North Carolina line; on the east by Pickens County from which it is separated by a line beginning in the middle of Seneca River, where Ravenel's Bridge is located over said river (Survey Station No. 1, being the centerwidth and length of said bridge) thence S. 78° 10' E. 17.60 chains to corner, S. 37.5° E. 6.48 chains to corner, S. 64° 20' E. 4.92 chains to corner, N. 75° E. 8.06 chains to corner, S. 87° 35' E. 23.78 chains then the following courses and distances: S. 83° E. 9.16 chains, S. 72° 10' E. 6.00 chains, S. 54.75° E. 6.08 chains, S. 38.75° E. 1.43 chains, S. 31° E. 10.53 chains, to stone on east side of road near Agricultural Hall, thence S. 72° 50' E. 5.10 chains to corner, N. 85° 25' E. 20.17 chains to corner, N. 89° E. 15.13 chains to corner, N. 84° E. 9.13 chains, S. 76° E. 14.40 chains, S. 61° E. 4.86 chains, S. 33.5° E. 11.86 chains, S. 50° 20' E. 34.96 chains, S. 56.5° E. 21.15 chains, S. 62.25° E. 8.86 chains, S. 43.5° E. 11.44 chains, S. 37° E. 18.45 chains, S. 64.25° E. 19.40 chains, to corner in center of top-soil highway on the Anderson County line. Said corner being N. 65.5° W. 4.81 chains from the northwest corner of cement bridge over Eighteen Mile Creek. It is the intent of this section to establish the new top-soil highway as the boundary of Pickens and Oconee Counties. It is bounded on the south by Anderson County, from which it is separated by a line, commencing at the mouth of Cane Creek on Tugaloo River and running thence along the line which originally separated Anderson and Pickens districts to its point of intersection with the public road leading from Ravenel's Bridge to Pendleton Village; on the west and northwest by the state of Georgia, from which it is separated by the Tugaloo and Chattooga Rivers. The total area encompassed by Oconee's borders is approximately 670 square miles (432,227 acres).

### Climate

Located at the edge of the southern Appalachian Mountains, Oconee County is blessed with a climate that offers its residents four distinct seasons. Summers, though typically warm, usually offer only occasional periods of hot weather. Winters, as well, are generally mild, with extremely cold weather limited to relatively short episodes. And in between, spring and autumn provide Oconee with pleasant days that have served as a beacon to thousands from other regions looking for a mild climate and relaxed lifestyle. In general: "South Carolina has a warm, moderate climate with hot, humid summers. Rainfall records kept since 1895 show the statewide average rainfall is near 48 inches, although it has ranged from 32 to 70 inches."<sup>1</sup> The South Carolina State Climatology Office is an excellent resource on statistical data for the State and region. The following table shows some of the weather characteristics of the county.

#### Table NR-1

Oconee County's 30-year Climate Normal
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Highest Maximum Temperature	106° F (August 17, 1954)
Lowest Minimum Temperature	-5° F (January 21, 1985)
Annual Average Maximum Temperature	72.1° F
Annual Average Minimum Temperature	47.0° F

<sup>&</sup>lt;sup>1</sup> SC Department of Natural Resources. "The South Carolina Drought Response Program".

Annual Average Mean Temperature	59.4° F	
Highest Daily Rainfall	9.65 inches 1924	
Annual Average Rainfall	60.32 inches	
Wettest Year	120.75 inches 2013	
Driest Year	26.41 inches 2016	
Highest Snowfall	15 inches 1988	

Source: South Carolina Department of Natural Resources, State Climatology Office

One of the benefits of Oconee's climate is a relatively long growing season, which allows for the successful production of a large number of crops. The county lies within the U.S. Department of Agriculture's Plant Hardiness Zone 7a. Table NR-2 illustrates the dates of the first and last freezing temperatures in Oconee based on data gathered at Walhalla between 1961 and 1990.

Table NR-2

Probability	Temperature		
Last freezing temperature in spring:	24°F or lower	28° F or lower	32° or lower
1 year in 10 later than	April 5	April 20	May 4
2 year in 10 later than	March 30	April 14	April 29
5 year in 10 later than	March 19	April 4	April 20
First freezing temperature in fall:			
1 year in 10 earlier than	November 1	October 15	October 5
2 year in 10 earlier than	November 5	October 21	October 10
5 year in 10 earlier than	November 15	November 2	October 20

Source: South Carolina Department of Natural Resources, State Climatology Office

In spite of Oconee County's temperate climate, extreme weather events do occur, occasionally taking the form of tornados. And though most Oconee tornados are relatively small, property damage and personal injuries are not unknown. According to information from the U.S. National Oceanic & Atmospheric Administration's National Climatic Data Center, nineteen tornados were detected in Oconee County between 1973 and 2003, which equates to an average of one tornadic event every one and a half years. As this is this is just an average, however, it should be noted that much longer periods of time regularly elapse without any tornadic activity; of course, in a few cases, a single series of storms have produced multiple tornados on a single day. Table NR-3 below illustrates recorded tornado activity in Oconee County between January 1, 1990 and December 31, 2000.

Table NR-3					
Recorded Tornado Activity in Oconee County, 1950-2016					
Location	Date	*Magnitude	Injuries	Est. Property Damage	
Oconee (no specific location)	1950-2016		15	6.928 million	
Westminster	03/23/1993	F0	0	\$1,000	
Long Creek to Pickett Post	03/27/1994	F3	12	\$5,000,000	
Pickett Post	06/26/1994	F2	0	\$500,000	
Fair Play	01/14/1995	F1	0	\$5,000	
Tokeena Crossroads	09/16/1996	F1	0	\$200,000	

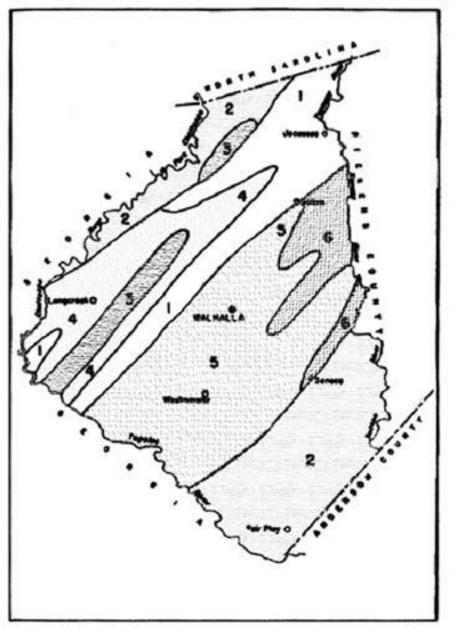
Westminster	02/21/1997	F0	0	\$5,000
Walhalla	05/07/1998	F0	0	0
Oakway	05/07/1998	F0	0	\$5,000
Tokenna Crossroads	10/04/1999	F0	0	0
Westminster	06/16/2000	F0	0	\$5,000
Walhalla	06/16/2000	Funnel Cloud	0	0
Tamassee	06/16/2000	F0	0	0

\*Magnitude measured by Fujita-Pearson Scale (F0 = 0.72mph windspeed; F1 = 73.112mph windspeed; F2 = 113.157mph windspeed; F3 = 158.206mph windspeed; F4 = 207.260mph windspeed; F5 = 261+ windspeed) Source: U.S. National Oceanic & Atmospheric Administration, National Climatic Data Center

Though tornados are viewed as perhaps the most extreme climatological threat to Oconee County residents, a number of other threatening weather events commonly occur. According to weather records, Oconee County experienced 57 thunderstorms with winds exceeding 60 miles per hour between 1948 and 2000; 66 hail storms between 1959 and 2000; 35 floods between 1975 and 1995; 59 ice, sleet or snow events between 1975 and 1995; and 552 wildfires (accounting for 2,164 acres burned) between 1975 and 1995. (South Carolina Department of Natural Resources, State Climatology Office).

## Geology





Geologic Map of Oconee County: (1) Mylonitized granite gneiss and hornblende gneiss; (2) Oligoclase-biotite schist; (3) Cockeysville marble, Setters formation, and associated volcanic rocks; (4) Albite-chlorite schist and garnetiferous phyllonite; (5) Wissahickon schist with igneous injection; (6) Granite, gabbro, and hornblende gneiss.

Source: Soil Survey of Oconee County; Shading by Oconee County Planning Department to Enhance Definition

Oconee County's underlying bedrock is composed of a series of metamorphic and metasedimentary rocks traversed by a series of igneous intrusions. At the beginning of the Paleozoic era, the region was below sea level, leading to the accumulation of deposits of sand, gravel, silt and limestone. During the late Paleozoic, granite intruded into the schists, gneisses, and slates. At the end of the period, tremendous upheaval occurred, leading to significant folding, faulting, and brecciation. The result of such metamorphism is that in modern times it is sometimes impossible to determine if the original rocks were sedimentary or igneous. (Soil Survey of Oconee County)

The soils in Oconee County resulted from the weathering of, among others, schistose and gneissoid granite, diorite, and volcanic rock. Batholiths, sills, dikes, and surface flows are generally composed of granite, pyroxenite, peridotite, porphyrite, diorite, diabase and gabbro. The northwestern areas of the county are host of outcroppings made up of oligoclase-biotite schist, albite-chlorite schist, and similar rock. Mylonitized granite gneiss and hornblende gneiss can also be found in northwestern Oconee. (Soil Survey of Oconee County)

Granites in Oconee are composed of various textured materials ranging from crystalline to porphyritic. While some are likely of Precambrian age, others may be Carboniferous. The granites have been classified as being mixtures of quartz, feldspar and biotite. (Soil Survey of Oconee County)

Deposits of the following materials have been located in Oconee: gold, silver-lead, corundum, tremolite, talc, soapstone, asbestos, graphite, feldspar, mica, granite-gneiss, granite, limestone, and marble. (Soil Survey of Oconee County) Radon, a known carcinogen, has been found in Oconee County. This gas, which may be found in soil, rocks, water, and air, results from the radioactive breakdown of uranium. As radon presents a potential health risk to all those contacting it, experts are particularly concerned about the infiltration of the gas into homes. Additionally, in recent years concerns have been raised about levels of radon found in local residential wells. Because surface water in streams and lakes comes into contact with air, much of the gas is dissipated before being contacted by humans. Groundwater supplying wells, however, retains much of the radon. The Environmental Protection Agency (EPA) has classified Oconee County as having a moderate potential (from 2 to 4 picocuries per liter [pCi/L]) for the presence of radon. According to EPA, specific effects on individuals vary with personal health, time of exposure, quantity of exposure, and other factors. In addition, the level of potential assigned to a particular area does not indicate the level of radon to be found in any given location within that area. Because there is no way to accurately predict the level of radon in specific locations, the EPA recommends that each home be tested individually. To guard against infiltration of the gas into homes, relatively inexpensive measures should be taken at the time of construction. For retro-fitting existing structures, however, more costly methods must be employed.

## Soils

Although Oconee County's recent economic history has been a tale of increased industrialization and commercialization, the area's traditional lifestyle, not unlike many other areas of the southern United States, was based on agriculture. For generations, therefore, Oconee's soils played a direct role in the lives of almost all county residents. Yet, as was the case in other similar areas, early agricultural practices damaged the area's soils, leaving many fields eroded and streams full of sediment. Today, of course, modern agricultural and conservation methods implement best management practices, and many of the damaged areas have been successfully reclaimed. As a result, Oconee County farmers are able to not only obtain yields unimaginable to their predecessors, but also maintain the health of the source of their prosperity.

In 1958, the United States Department of Agriculture's Soil Conservation Service, now known as the Natural Resources Conservation Service (NRCS), published the results of a soil survey that identified, located, categorized, and mapped all of Oconee County's soils. Soil scientists traveled throughout the county cataloging, in addition to soil types, slopes, streams, plants, agricultural operations, and other items directly impacted by soils. The gathered data was then compared to similar information from other areas, thereby allowing Oconee's soils to be classified and named according to standard procedures. When completed, the information was combined and published as the <u>Soil Survey of Oconee</u> County, South Carolina.

Table NR-4 lists the soil series of Oconee County, along with the range of slope, acreage and percentage of total area that each soil comprises.

Soil Series in Oconee County				
Soil	Slope Range (%)	Acres	Total Area (%)	*Suitability for Drainfields
Altavista sandy loam	0-6	371	0.1	Sv
Appling sandy loam	2-6	684	.2	М
Appling sandy loam (eroded)	2-6	503	.1	М
Appling sandy loam	6-10	675	.2	М
Appling sandy loam	10-15	247	.1	М
Appling sandy loam	15-30	434	.1	Sv
Ashe sandy loam	25-30	1,794	.4	Sv
Buncombe loamy sand		475	.1	Sv
Cecil sandy loam	2-6	1,397	.3	М
Cecil sandy loam (eroded)	2-6	14,061	3.3	М
Cecil sandy loam	6-10	1,358	.3	М
Cecil sandy loam (eroded)	6-10	19,694	4.6	М
Cecil sandy loam	10-15	1,932	.4	М
Cecil sandy loam (eroded)	10-15	9,767	2.3	М
Cecil sandy loam	15-25	9,213	2.1	Sv
Cecil sandy loam (eroded)	15-25	8,414	2.0	Sv
Cecil sandy loam	25-35	3,220	.7	Sv
Cecil sandy loam (eroded)	25-35	2,112	.5	Sv
Cecil clay loam (severely eroded)	2-6	716	.2	М
Cecil clay loam (severely eroded)	6-10	4,356	1.0	М
Cecil clay loam (severely eroded)	10-15	9,148	2.1	М
Cecil clay loam (severely eroded)	15-25	15,422	3.6	Sv
Chewalca silt loam		3,013	.7	Sv

### Table NR-4

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Davison learn (eroded)         2-6         277         .1         M           Culliced and (hilly)	Congaree silt loam				
Guilie Land (rolling)          449         1.         M           Guilie Land (hilty)          8.447         2.0         Sv           Halewood fine sandy loam (eroded)         6.10         1.422         3.         M           Halewood fine sandy loam (eroded)         10.15         768         2.         M           Halewood fine sandy loam (eroded)         115.25         3.23         7.         Sv           Halewood fine sandy loam (eroded)         15.25         3.17         Sv           Halewood fine sandy loam (eroded)         15.25         3.17         Sv           Halewood fine sandy loams         2.6         1.072         2.         M           Hayesville and Cecil fine sandy loams         6-10         1.756         4.         M           Hayesville and Cecil fine sandy loams         16-15         3.251         8.         M           Hayesville and Cecil fine sandy loams         15-25         10.352         2.4         Sv           Hayesville and Cecil fine sandy loams         15-25         10.352         2.4         Sv           Hayesville and Cecil fine sandy loams         15-25         10.352         2.4         Sv           Hayesville and Cecil fine sandy loams         25-45<			,		
Guilied land (hilly)          8.47         2.0         Sv           Halewood fine sandy loam (croded)         6-10         1.422         .3         M           Halewood fine sandy loam (croded)         10-15         815         .2         M           Halewood fine sandy loam (croded)         10-15         768         .2         M           Halewood fine sandy loam (croded)         15-25         3,223         .7         Sv           Halewood fine sandy loam (croded)         15-25         3,825         9.0         Sv           Halewood fine sandy loam (croded)         15-25         10.72         M         M           Hayesville and Cecil fine sandy loams         6-6         10         5,003         1.2         M           Hayesville and Cecil fine sandy loams         10-15         6,319         1.6         M         M           Hayesville and Cecil fine sandy loams         10-15         6,819         1.6         M         M           Hayesville and Cecil fine sandy loams         15-25         10,352         2.4         Sv           Hayesville and Cecil fine sandy loams         25-45         1,540         4         Sv           Hayesville and Cecil fine sandy loams         25-45         1,540		2-0			
Halewood fine sandy loam (croded)         2-6         575         .1         SI           Halewood fine sandy loam (croded)         10-15         815         .2         M           Halewood fine sandy loam (croded)         10-15         768         .2         M           Halewood fine sandy loam (croded)         15-25         3,223         .7         Sv           Halewood fine sandy loam (croded)         15-25         917         .2         Sv           Halewood fine sandy loam (croded)         15-25         917         .2         N           Hayesville and Cecil fine sandy loams         6-10         1,756         .4         M           Hayesville and Cecil fine sandy loams         10-15         3,221         .8         M           Hayesville and Cecil fine sandy loams         10-15         3,221         .8         M           Hayesville and Cecil fine sandy loams         15-25         21,529         5.0         Sv           Hayesville and Cecil fine sandy loams         15-25         10,352         2.4         Sv           Hayesville and Cecil fine sandy loams         25-45         1,5642         13.0         Sv           Hayesville and Cecil fine sandy loams         25-45         1,5642         13         Sv <td></td> <td></td> <td></td> <td></td> <td></td>					
Halewood fine sandy loam         6-10         1.422         3         M           Halewood fine sandy loam         10-15         815         2         M           Halewood fine sandy loam (croded)         15-25         3,223         7.7         Sv           Halewood fine sandy loam (croded)         15-25         917.9         2         Sv           Halewood fine sandy loam         26-4         1,072         2         M           Hayesville and Cecil fine sandy loams         6-10         1,756         4         M           Hayesville and Cecil fine sandy loams         6-10         5,003         1.2         M           Hayesville and Cecil fine sandy loams         10-15         6,819         1.6         M           Hayesville and Cecil fine sandy loams         15-25         21,529         5.0         Sv           Hayesville and Cecil fine sandy loams         15-25         10,352         2.4         Sv           Hayesville and Cecil fine sandy loams         25-45         55.642         13.0         Sv           Hayesville and Cecil fine sandy loams         25-45         1.540         4         Sv           Hayesville and Cecil fine sandy loams         25-45         1.540         4         Sv         Sv					
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Halewood fine sandy loam (croded)         10-15         768         2         M           Halewood fine sandy loam         15-25         3.223         7.         Sv           Halewood fine sandy loam         25-45         38.559         9.0         Sv           Hayesville and Cecil fine sandy loams         6-10         1.756         .4         M           Hayesville and Cecil fine sandy loams         6-10         5.003         1.2         M           Hayesville and Cecil fine sandy loams         10-15         6.819         1.6         M           (croded)         Hayesville and Cecil fine sandy loams         10-15         6.819         1.6         M           Hayesville and Cecil fine sandy loams         15-25         21.529         5.0         Sv           Hayesville and Cecil fine sandy loams         15-25         10.352         2.4         Sv           Hayesville and Cecil fine sandy loams         25-45         15.642         1.3.0         Sv           Hayesville and Cecil fine sandy loams         25-45         1.540         4         Sv           Hayesville and Cecil loams (severely         10-15         738         .2         M           eroded)         Hayesville and Cecil loams (severely         15-25         222 <td></td> <td></td> <td>,</td> <td></td> <td></td>			,		
Halewood fine sandy loam         15-25         3.223         7         Sv           Halewood fine sandy loam         25-45         38,559         9.0         Sv           Hayesville and Cecil fine sandy loams         2-6         1.072         .2         M           Hayesville and Cecil fine sandy loams         6-10         5.003         1.2         M           Hayesville and Cecil fine sandy loams         6-10         5.003         1.2         M           Hayesville and Cecil fine sandy loams         10-15         3.251         .8         M           Hayesville and Cecil fine sandy loams         10-15         3.251         .8         M           Hayesville and Cecil fine sandy loams         15-25         10.352         2.4         Sv           Hayesville and Cecil fine sandy loams         25-45         15.642         13.0         Sv           Hayesville and Cecil fine sandy loams         25-45         1.540         4         Sv           Hayesville and Cecil fine sandy loams         25-45         1.540         4         Sv           Hayesville and Cecil loams (severely         10-15         738         .2         M           Hayesville and Cecil loams (severely         10-15         738         .2         M					
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Halewood fine sandy loam         25-45         38,559         9.0         Sv           Hayesville and Cecil fine sandy loams         6-10         1,756         .4         M           Hayesville and Cecil fine sandy loams         6-10         5.003         1.2         M           Hayesville and Cecil fine sandy loams         10-15         3.251         .8         M           Hayesville and Cecil fine sandy loams         10-15         3.251         .8         M           Hayesville and Cecil fine sandy loams         15-25         10,352         2.4         Sv           Hayesville and Cecil fine sandy loams         15-25         10,352         2.4         Sv           Hayesville and Cecil fine sandy loams         25-45         55.642         13.0         Sv           Hayesville and Cecil loams (severely         6-10         415         .1         M           eroded)					
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Hayesville and Cecil fine sandy loams         6-10         1.756         .4         M           Hayesville and Cecil fine sandy loams         6-10         5,003         1.2         M           Hayesville and Cecil fine sandy loams         10-15         3,251         .8         M           Hayesville and Cecil fine sandy loams         10-15         6,819         1.6         M           (eroded)         10-15         6,819         1.6         M           Hayesville and Cecil fine sandy loams         15-25         10,352         2.4         Sv           Hayesville and Cecil fine sandy loams         25-45         1,540         .4         Sv           Hayesville and Cecil loams (severely         6-10         415         .1         M           Hayesville and Cecil loams (severely         10-15         738         .2         M           Hayesville and Cecil loams (severely         15-25         449         .1         Sv           Hayesville and Cecil and Halewood sandy         15-25         292         1.0         Sv           Hayesville (Cecil, and Halewood sandy         15-25         292         1         M           Hayesville (Cecil, and Halewood sandy         15-25         292         1         M					
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Hayesville and Cecil fine sandy loams         10-15         3,251         8         M           Hayesville and Cecil fine sandy loams         10-15         6,819         1.6         M           Hayesville and Cecil fine sandy loams         15-25         21,529         5.0         Sv           Hayesville and Cecil fine sandy loams         15-25         10,352         2.4         Sv           Hayesville and Cecil fine sandy loams         25-45         5,5642         13.0         Sv           Hayesville and Cecil loams (severely         6-10         415         .1         M           eroded)         Hayesville and Cecil loams (severely         10-15         738         .2         M           Hayesville and Cecil loams (severely         15-45         4,252         1.0         Sv           Hayesville and Cecil loams (severely         15-25         449         .1         Sv           Hayesville, Cecil, and Halewood sandy         15-25         292         1.0         Sv           Hayesville (shallow)         25-60         7,298         1.7         Sv           Hayesses andy loam (eroded)         6-10         409         1         M           Hayesses andy loam (eroded)         16-15         360         .1         M	(eroded)	0.10	5,005	1.2	141
		10-15	3.251	8	М
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(eroded)         -           Hayesville and Cecil fine sandy loams $25-45$ $55,642$ $13.0$ Sv           Hayesville and Cecil fine sandy loams $25-45$ $1,540$ $4$ Sv           eroded)         6-10         415 $.1$ M           eroded)         738 $.2$ M           Hayesville and Cecil loams (severely $10-15$ $738$ $.2$ M           eroded)         15-45 $4,252$ $1.0$ Sv           Hayesville, Cecil, and Halewood sandy $15-25$ $449$ $.1$ Sv           Iaayesville, Cecil, and Halewood sandy $25-60$ $7,298$ $1.7$ Sv           Hayesselle, Cecil, and Halewood sandy $25-60$ $7,298$ $1.7$ Sv           Hawassee sandy loam (eroded) $10-15$ $300$ $1$ M           Hiawassee caly loan (werely eroded) $10-15$ $300$ $1$ M           Loyd sandy loam (eroded) $10-15$ $5,824$ $1.4$ M           Loyd sandy loam (eroded) $10-15$ $5,824$ $1.4$ M </td <td></td> <td></td> <td>-</td> <td></td> <td></td>			-		
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		25-45	55,642	13.0	Sv
Hayesville and Cecil loams (severely eroded)         6-10         415         .1         M           Hayesville and Cecil loams (severely eroded)         10-15         738         .2         M           Hayesville and Cecil loams (severely eroded)         15-45         4.252         1.0         Sv           Hayesville, Cecil, and Halewood sandy loams (shallow)         15-25         449         .1         Sv           Hayesville, Cecil, and Halewood sandy loams (shallow)         25-60         7.298         1.7         Sv           Hawassee sandy loam (eroded)         6-10         409         .1         M           Hiawassee sandy loam (eroded)         15-25         292         .1         M           Hiawassee sandy loam (eroded)         10-15         360         .1         M           Lloyd sandy loam (eroded)         10-15         360         .1         M           Lloyd sandy loam (eroded)         10-15         5,824         1.4         M           Lloyd sandy loam (eroded)         10-15         5,824         1.4         M           Lloyd sandy loam (eroded)         10-15         5,711         1.8         Sv           Lloyd sandy loam (eroded)         10-15         5,711         1.8         Sv			-,0		
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eroded)             Hayesville and Cecil loams (severely eroded)         15-45         4,252         1.0         Sv           Hayesville, Cecil, and Halewood sandy loams (shallow)         15-25         449         .1         Sv           Hayesville, Cecil, and Halewood sandy loams (shallow)         25-60         7.298         1.7         Sv           Hawassee sandy loam (eroded)         6-10         409         1         M           Hiawassee sandy loam (eroded)         15-25         292         .1         M           Hiawassee sandy loam (eroded)         15-25         292         .1         M           Lloyd sandy loam (eroded)         2-6         7.954         1.8         M           Lloyd sandy loam (eroded)         6-10         8.996         2.1         M           Lloyd sandy loam (eroded)         10-15         5.824         1.4         M           Lloyd sandy loam (eroded)         10-15         5.824         1.4         M           Lloyd sandy loam (eroded)         10-15         5.824         1.4         M           Lloyd sandy loam (eroded)         10-15         5.711         1.3         M           Lloyd sandy loam (eroded)         15-25         14.661	Hayesville and Cecil loams (severely	10-15	738	.2	М
eroded)              Sv           Hayesville, Cecil, and Halewood sandy loams (shallow)         15-25         449         .1         Sv           Hayesville, Cecil, and Halewood sandy loams (shallow)         25-60         7.298         1.7         Sv           Hiawassee sandy loam (eroded)         2-6         392         .1         M           Hiawassee sandy loam (eroded)         6-10         409         .1         M           Hiawassee sandy loam (eroded)         10-15         360         .1         M           Lloyd sandy loam (eroded)         2-6         7.954         1.8         M           Lloyd sandy loam (eroded)         6-10         8.796         2.1         M           Lloyd sandy loam (eroded)         10-15         5.824         1.4         M           Lloyd sandy loam (eroded)         15-25         14.661         3.4         Sv           Lloyd sandy loam (eroded)         15-25         14.661         3.4         Sv           Lloyd sandy loam (eroded)         15-25         14.661         3.4         Sv           Lloyd sandy loam (eroded)         16-10         4.093         .9         M           Lloyd loan (mod					
Hayesville, Cecil, and Halewood sandy loams (shallow)         15-25         449         .1         Sv           Hayesville, Cecil, and Halewood sandy loams (shallow)         25-60         7,298         1.7         Sv           Hiawassee sandy loam (eroded)         2-6         392         .1         M           Hiawassee sandy loam (eroded)         15-25         292         .1         M           Hiawassee sandy loam (eroded)         15-25         292         .1         M           Lloyd sandy loam (eroded)         2-6         7,954         1.8         M           Lloyd sandy loam (eroded)         2-6         7,954         1.8         M           Lloyd sandy loam (eroded)         6-10         8,996         2.1         M           Lloyd sandy loam (eroded)         10-15         5,824         1.4         M           Lloyd sandy loam (eroded)         10-15         5,824         1.4         M           Lloyd sandy loam (eroded)         10-15         5,824         1.4         M           Lloyd sandy loam (severely eroded)         2-6         360         .1         M           Lloyd clay loam (severely eroded)         10-15         5,711         1.3         M           Lloyd clay loam (severely eroded) </td <td>Hayesville and Cecil loams (severely</td> <td>15-45</td> <td>4,252</td> <td>1.0</td> <td>Sv</td>	Hayesville and Cecil loams (severely	15-45	4,252	1.0	Sv
Hayesville, Cecil, and Halewood sandy loams (shallow)         25-60         7,298         1.7         Sv           Hiawassee sandy loam (eroded)         2-6         392         .1         M           Hiawassee sandy loam (eroded)         6-10         409         .1         M           Hiawassee sandy loam (eroded)         15-25         292         .1         Sv           Hiawassee sandy loam (eroded)         15-25         292         .1         M           Lloyd sandy loam (eroded)         2-6         7.954         1.8         M           Lloyd sandy loam (eroded)         6-10         8.996         2.1         M           Lloyd sandy loam (eroded)         10-15         5.824         1.4         M           Lloyd sandy loam (eroded)         15-25         14.661         3.4         Sv           Lloyd andy loam (eroded)         15-25         14.661         3.4         Sv           Lloyd andy loam (severely eroded)         16-15         5.711         1.8         Sv           Lloyd clay loam (severely eroded)         16-15         5.711         1.3         M           Lloyd clay loam (severely eroded)         15-35         8.891         2.1         Sv           Lloyd clay loam (moderately shallow-	Hayesville, Cecil, and Halewood sandy	15-25	449	.1	Sv
loams (shallow)             Hiawassee sandy loam (eroded)         2-6         392         .1         M           Hiawassee sandy loam (eroded)         15-25         292         .1         Sv           Hiawassee clay loam (eroded)         15-25         292         .1         Sv           Hiawassee clay loam (eroded)         2-6         7.954         1.8         M           Lloyd sandy loam (eroded)         6-10         572         .1         M           Lloyd sandy loam (eroded)         6-10         8,996         2.1         M           Lloyd sandy loam (eroded)         10-15         5,824         1.4         M           Lloyd sandy loam (eroded)         15-25         14,661         3.4         Sv           Lloyd sandy loam (eroded)         15-25         14,661         3.4         Sv           Lloyd sloam (severely eroded)         2-6         360         1         M           Lloyd clay loam (severely eroded)         10-15         5,711         1.3         M           Lloyd clay loam (severely eroded)         15-25         402         1         Sv           Lloyd clay loam (moderately shallow-         15-25         402         1         Sv	loams (shallow)				
Hiawassee sandy loam (eroded)         2-6         392         .1         M           Hiawassee sandy loam (eroded)         6-10         409         .1         M           Hiawassee sandy loam (eroded)         15-25         292         .1         Sv           Hiawassee clay loam (eroded)         15-25         292         .1         M           Lloyd sandy loam (eroded)         2-6         7,954         1.8         M           Lloyd sandy loam (eroded)         6-10         8,996         2.1         M           Lloyd sandy loam (eroded)         10-15         5,824         1.4         M           Lloyd sandy loam (eroded)         15-25         14,661         3.4         Sv           Lloyd sandy loam (eroded)         15-25         14,661         3.4         Sv           Lloyd sandy loam (eroded)         15-25         14,661         3.4         Sv           Lloyd clay loam (severely eroded)         6-10         4,093         .9         M           Lloyd clay loam (severely eroded)         15-35         8,891         2.1         Sv           Lloyd loam (moderately shallow-         15-25         402         .1         Sv           Lloyd loam (moderately shallow)         25-40         734		25-60	7,298	1.7	Sv
Hiawassee sandy loam (eroded)         6-10         409         .1         M           Hiawassee sandy loam (eroded)         15-25         292         .1         Sv           Hiawassee clay loam (severely eroded)         10-15         360         .1         M           Lloyd sandy loam (eroded)         2-6         7,954         1.8         M           Lloyd sandy loam (eroded)         6-10         572         .1         M           Lloyd sandy loam (eroded)         10-15         5,824         1.4         M           Lloyd sandy loam (eroded)         10-15         5,824         1.4         M           Lloyd sandy loam (eroded)         15-25         14,661         3.4         Sv           Lloyd sandy loam (severely eroded)         2-6         360         .1         M           Lloyd clay loam (severely eroded)         6-10         4,093         .9         M           Lloyd clay loam (severely eroded)         10-15         5,711         1.3         M           Lloyd clay loam (severely eroded)         10-15         5,711         1.3         M           Lloyd clay loam (moderately shallow-         15-25         402         .1         Sv           Loyd loam (moderately shallow)         25-40 <td></td> <td></td> <td></td> <td></td> <td></td>					
Hiawassee sandy loam (eroded)         15-25         292         .1         Sv           Hiawassee clay loam (severely eroded)         10-15         360         .1         M           Lloyd sandy loam (eroded)         2-6         7,954         1.8         M           Lloyd sandy loam (eroded)         6-10         572         .1         M           Lloyd sandy loam (eroded)         6-10         8,996         2.1         M           Lloyd sandy loam (eroded)         10-15         5,824         1.4         M           Lloyd sandy loam (eroded)         15-25         14,661         3.4         Sv           Lloyd clay loam (severely eroded)         2-6         360         .1         M           Lloyd clay loam (severely eroded)         10-15         5,711         1.3         M           Lloyd clay loam (severely eroded)         10-15         5,711         1.3         M           Lloyd clay loam (moderately shallow-         15-25         402         .1         Sv           Lloyd loam (moderately shallow-         25-40         734         .2         Sv           Local alluvial land          1,729         .4         Sv           Madison fine sandy loam, high         6-10 <t< td=""><td></td><td>2-6</td><td></td><td>.1</td><td>М</td></t<>		2-6		.1	М
Hiawasse clay loam (severely eroded)         10-15         360         .1         M           Lloyd sandy loam (eroded)         2-6         7,954         1.8         M           Lloyd sandy loam (eroded)         6-10 $572$ .1         M           Lloyd sandy loam (eroded)         10-15 $5,824$ 1.4         M           Lloyd sandy loam (eroded)         15-25         14,661         3.4         Sv           Lloyd sandy loam (eroded)         25-35         7,647         1.8         Sv           Lloyd clay loam (severely eroded)         2-6         360         .1         M           Lloyd clay loam (severely eroded)         10-15 $5,711$ 1.3         M           Lloyd clay loam (severely eroded)         15-35         8,891         2.1         Sv           Lloyd loan (moderately shallow- eroded)         15-25         402         .1         Sv           Loyd loam (moderately shallow)         25-40         734         .2         Sv           Local alluvial land          1,729         .4         Sv           Madison fine sandy loam, high         6-10         562         .1         M           Madison fine sandy loam, high (eroded)         10-1					
Lloyd sandy loam (eroded)       2-6       7,954       1.8       M         Lloyd sandy loam (eroded)       6-10       572       .1       M         Lloyd sandy loam (eroded)       10-15       5,824       1.4       M         Lloyd sandy loam (eroded)       15-25       14,661       3.4       Sv         Lloyd sandy loam (eroded)       15-25       14,661       3.4       Sv         Lloyd sandy loam (severely eroded)       2-6       360       .1       M         Lloyd clay loam (severely eroded)       6-10       4,093       .9       M         Lloyd clay loam (severely eroded)       10-15       5,711       1.3       M         Lloyd clay loam (severely eroded)       15-35       8,891       2.1       Sv         Lloyd clay loam (severely eroded)       15-35       8,891       2.1       Sv         Lloyd loam (moderately shallow-       15-25       402       .1       Sv         eroded)       2-6       156       <.1					
Lloyd sandy loam         6-10         572         .1         M           Lloyd sandy loam (eroded)         6-10 $8,996$ 2.1         M           Lloyd sandy loam (eroded)         10-15 $5,824$ 1.4         M           Lloyd sandy loam (eroded)         15-25         14,661         3.4         Sv           Lloyd clay loam (eroded)         2-6         360         1         M           Lloyd clay loam (severely eroded)         2-6         360         1         M           Lloyd clay loam (severely eroded)         6-10         4,093         .9         M           Lloyd clay loam (severely eroded)         10-15         5,711         1.3         M           Lloyd clay loam (severely eroded)         10-15         5,711         1.3         M           Lloyd loam (moderately shallow-         15-25         402         .1         Sv           Local alluvial land          1,729         .4         Sv           Madison fine sandy loam, high         2-6         156         <.1			360	.1	М
Lloyd sandy loam (eroded)         6-10 $8,996$ $2.1$ M           Lloyd sandy loam (eroded)         10-15 $5,824$ $1.4$ M           Lloyd sandy loam (eroded)         15-25 $14,661$ $3.4$ Sv           Lloyd sandy loam (eroded) $25-35$ $7,647$ $1.8$ Sv           Lloyd clay loam (severely eroded) $2-6$ $360$ $.1$ M           Lloyd clay loam (severely eroded) $6-10$ $4,093$ $.9$ M           Lloyd clay loam (severely eroded) $10-15$ $5,711$ $1.3$ M           Lloyd clay loam (severely eroded) $15-35$ $8,891$ $2.1$ $Sv$ Lloyd loam (moderately shallow- $15-25$ $402$ $.1$ $Sv$ Lloyd loam (moderately shallow) $25-40$ $734$ $.2$ $Sv$ Madison fine sandy loam, high $2-6$ $156$ $<.1$ $Sl$ Madison fine sandy loam, high $6-10$ $1,193$ $.3$ $M$ Madison fine sandy loam, high $10-15$ $1,29$ $.3$ $M$					
Lloyd sandy loam (eroded)         10-15         5,824         1.4         M           Lloyd sandy loam (eroded)         15-25         14,661         3.4         Sv           Lloyd sandy loam (eroded)         25-35         7,647         1.8         Sv           Lloyd clay loam (severely eroded)         2-6         360         .1         M           Lloyd clay loam (severely eroded)         6-10         4,093         .9         M           Lloyd clay loam (severely eroded)         10-15         5,711         1.3         M           Lloyd clay loam (severely eroded)         15-35         8,891         2.1         Sv           Lloyd loam (moderately shallow-         15-25         402         .1         Sv           Lloyd loam (moderately shallow)         25-40         734         .2         Sv           Local alluvial land          1,729         .4         Sv           Madison fine sandy loam, high         2-6         156         .1         Sl           Madison fine sandy loam, high         10-15         1,129         .3         M           Madison fine sandy loam, high         10-15         1,129         .3         M           Madison fine sandy loam, high         15-25					
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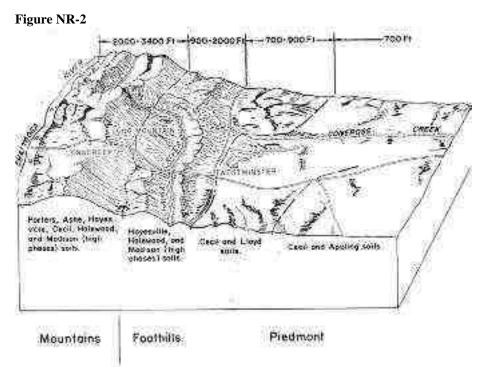
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Mixed wet alluvial land		3,189	.7	Sv
Porters loam	25-45	2,071	.5	Sv
Porters stony loam	25-45	1,188	.3	Sv
State fine sandy loam		334	.1	М
Stony land		377	.1	Sv
Talladega and Chandler loams	10-25	625	.1	Sv
Talladega and Chandler loams	25-60	23,995	5.6	Sv
Watauga fine sandy loam (eroded)	2-6	109	<.1	М
Watauga fine sandy loam (eroded)	6-10	81	<.1	М
Watauga fine sandy loam (eroded)	10-25	138	<.1	Sv
Watauga fine sandy loam	25-40	293	.1	Sv
Wickham sandy loam	2-6	472	.1	М
Wickham sandy loam (eroded)	2-6	1,713	.4	М
Wickham sandy loam (eroded)	6-10	681	.2	М
Wickham sandy loam (eroded)	10-15	429	.1	М
Wickham sandy loam (eroded)	15-25	260	.1	Sv
Wickham clay loam (severely eroded)	6-10	282	.1	М
Worsham sandy loam	0-6	934	.2	Sv
Worsham sandy loam (eroded)	6-15	108	<.1	М

\* Limitations for septic system drainfield taken from Sanitary Facilities suitability report for all Oconee County soils, NRCS [SI = Slight Limitations; M = Moderate Limitations; Sv = Severe Limitations

Source: <u>Soil Survey of Oconee County</u>; "Sanitary Facilities: All Oconee Soil", Natural Resources Conservation Service (3/18/1999)

As Table NR-4 shows, 23 separate series' of soils are found in Oconee County. The distribution of soils range from Cecil, Appling, and Lloyd soils in the Piedmont Plateau; to the Hayesville, Halewood and Madison soils in the foothills and mountains. While some soils are only found in small quantities, sometimes accounting for only a few acres across the entire county, a few make up tens of thousands of acres. Also, each area of the county offers differing, sometimes unique, combinations of soils that change with varying topography, greatly impacting suitability for various land uses in particular locations. For example, Hayesville and Cecil fine sandy loams in areas with 2-6% slopes are only moderately limited in suitability for septic tank absorption fields. Yet, with the same soils on slopes greater than 15%, absorption is severely limited. Other factors impacting suitability for particular land uses include organic matter content, permeability, and depth. For more detailed information on soils, refer to the <u>Soil Survey of Oconee County</u>.

Figure NR-2 illustrates the general division of soil series related to the county's physiography, showing the regions where much of the major soils can be found.



Source: Soil Survey of Oconee County

The Oconee Soil and Water Conservation District is a locally elected board which relies on the technical assistance of the USDA-Natural Resources Conservation Service to promote the conservation of natural resources in the county. Their input on the subject of soils valuable and all efforts to help preserve our resources in soil will need to be in coordination with the District.

One of the areas that have been overlooked as a threatened resource in recent decades is soil. Historically, soil erosion was elevated to a national crisis in the Depression, which resulted in the formation of the Soil Erosion Service (now the NRCS) and local Soil & Water Conservation Districts. The marriage of the US Department of Agriculture with local governing bodies (by county) enabled soil loss to be swiftly abated through installation of conservation practices such as contour farming, terracing, crop residue management, crop rotation, grassed waterways, and field borders. Massive soil erosion was curtailed with the incorporation of these practices in typical farm operations. Movement away from agriculture throughout the decades following the 1930's resulted in the conversion of cropland to permanent sod, trees, and other uses. Thus, the awareness of the need to conserve soil and prevent erosion has taken a back seat to water quality.

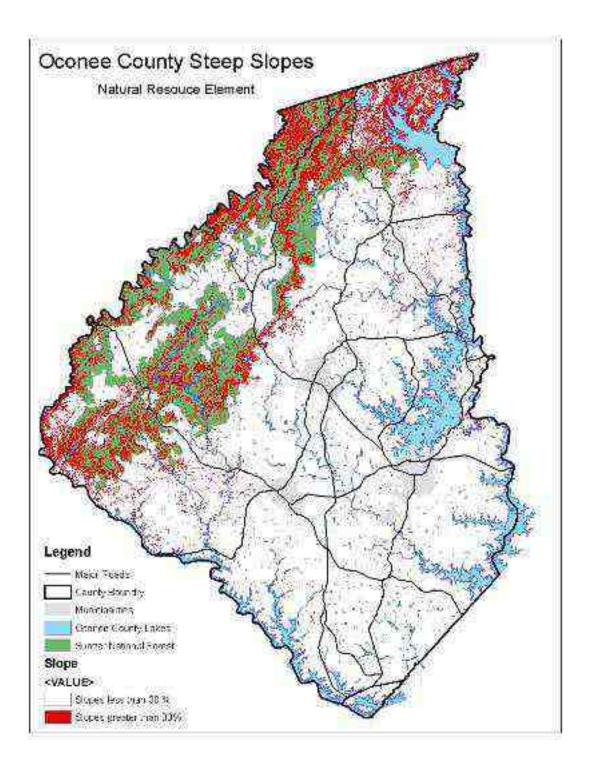
If soil erosion was as obvious today as it was during the 1930's, efforts to protect/conserve this resource would be equal to or greater than those for water quality. It takes hundreds, even thousands, of years to create one inch of soil. With that in mind we need to consider the following facts:

- 1. Without considering the United States Forest Service lands, there are 98 different soils found in Oconee County.
- 2. Of these, 41 are found to be "prime" or "of statewide importance" (soils most suitable for agricultural production)
- 3. The 41 different soils make up only 21% of the County's soil resources.
- 4. The above mentioned acreage falls mostly in the agricultural community in the southern end of the county

A USDA technical bulletin states that prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, and oilseed crops. It has the combination of soil properties, growing season, and moisture supply needed to produce sustained high yields of crops in an economic manner if it is treated and managed according to acceptable farming methods. In general, prime farmland has an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks.<sup>2</sup> Not only should the county look at protecting these prime farmlands from development but efforts to promote best farm practices which promote soil regeneration should be held in similar regard.

The loss of soils is also closely tied to the slope of the land. When steep slopes are encountered, best development practices must be adhered to. Cleared land combined with steep slopes will result in rapid erosion which leads to the sedimentation of creeks, rivers, and lakes. Barren steep slope areas also have the potential to negatively impact the neighboring properties due to runoff problems. Oconee County has been blessed with breath taking mountain views and river valleys but this blessing also brings with it a number of steep slope areas that need to be developed very cautiously. It would be preferable to limit the development on steep slopes and to protect the vegetation on those areas. Minimal disturbance to natural vegetation helps to prevent storm water runoff and maintain the integrity of the soil in the area in question. The following map depicts those areas in Oconee County that have slopes greater than thirty (30%) percent. Due to the scale of the map, all areas may not be visible.

<sup>&</sup>lt;sup>2</sup> Natural Resources Conservation Service, USDA. §657.5, 7CRF Ch. VI (1-1-100 Edition), pg 724.



## Terrain

Oconee County is a region of diverse terrain separated into three distinct physiographic areas (See Figure NR-1). The Piedmont Plateau area, which lies predominantly in the southern part of the county, accounts for about 42% of total county acreage, and averages about 690 feet above mean sea level (<u>Soil Survey of Oconee County</u>). Given the availability of easily farmable tracts of land in this region, it has traditionally been the location of most of the intensive row cropping operations in the county, and as such is the site of the majority of the county's remaining prime agricultural lands.

The foothills region of Oconee lies in a band running from southwest to northeast, separating the Blue Ridge Mountains in the north and the Piedmont Plateau in the south. The foothills comprise about 35% of the county, and range in elevation from 780 feet to 2,200 feet above mean sea level (<u>Soil Survey of Oconee County</u>). Because the wide range in elevation includes many areas of severely steep slopes and thinner soils, farming activities have traditionally been more limited than those in the Piedmont Plateau region. The last of the three physiographic regions makes up the approximately 23% of Oconee County, and lies in the Blue Ridge Mountains. Extending in a band lying west and north of the foothills region, the Blue Ridge Mountains are part of the southern Appalachian Mountain chain. With elevations that range from 2,200 feet to 3,400 feet above mean sea level, the terrain in this area of Oconee is often extremely steep and difficult to access (<u>Soil Survey of Oconee County</u>).

## **Conservation and Land Preservation Efforts**

The citizens of Oconee County have expressed a unified desire to preserve the unique characteristics of the region. Although, the common realization that we need to protect both the beauty and quality of the county's resources, vastly different viewpoints always make government involvement difficult. The 2008 Oconee by Choice Plan states: "Citizens want to ensure their community remains "a place where nature is respected not exploited." Several major areas need to be considered as we move forward in the discussion of how to protect our natural resources. Issues such as water, soils, and agricultural preservation will become forefront issues in the years to come.

The preservation of natural resources for future generations is often achieved through government protections and public/private partnerships that protect the land. Examples of government sponsored preservation are prevalent in Oconee County. Sumter National Forest, which comprises a large portion of the northwestern part of the county, is just one example. We are blessed with several state and county parks, which all citizens have the opportunity to use. Governments should continue to look for ways that they can preserve precious land resources as opportunities arise. We have also seen in recent years the increase in public/private partnerships working together to preserve the land.

Another area that must be considered by Oconee Citizens for Protection is the conservation of agricultural lands. With increasing demands placed on farms by development pressure, farm owners are starting to consider how they may protect their farm land. The South Carolina Legislature passed the Right to Farm Law which "gives existing farms some protection from nuisance complaints. Its purpose is to lessen the loss of farmland caused by common law nuisance actions that arise when nonagricultural land uses expand into agricultural lands."<sup>3</sup> The protections provided by the Right to Farm Law protect the farm operations from law suits but it does not protect land from being developed into other types uses. True protection of land can be achieved though such mechanisms as land trusts, development rights, and good estate planning. The following table has been adopted from the South Carolina Agricultural Landowners Guide.

Conservation Type	Summary
Agricultural Conservation Easements <sup>4</sup>	"An agricultural conservation easement is a voluntary deed restriction that landowners willingly place on their land. It permanently limits subdivision and non- agricultural development."
Conservation Bank	"Signed into law in 2002, the South Carolina Conservation Bank provides funding for protection of natural resources through the cons
Estate Planning	"Good estate planning accomplishes at least four goals: transferring ownership and management of the agricultural operation, land and other assets; avoiding unnecessary income, gift, and estate taxes; ensuring financial security and peace of mind for all generations; and developing the next generation's management capacity."
Farm and Ranch Lands Protection Program	This program "is administered by the USDA Natural Resources Conservation Service to provide matching funds to help purchase agricultural conservation easements on productive farm and ranch lands To qualify, landowners must work with state and local governments or non-governmental entities to secure a pending offer with funding at least equal to 50 percent of the land's fair market easement value."
Forest Legacy Program	This program was established in the 1990 farm bill and is administered by the USDA Forest Service and the SCDNR. Funds are used to purchase conservation easements on working forestland threatened by conversion to non-forested uses. This program is limited to private forest landowners who have prepared a multiple resource management plan.
Grassland Reserve Program	"The 2002 Farm Bill authorized this program. Private lands of 40 or more contiguous acres historically dominated by grasses or shrubs are eligible for the program. The land should have livestock currently grazing. Landowners with eligible property may

Table NR-5

<sup>&</sup>lt;sup>3</sup> "South Carolina Agricultural Landowners Guide." American Land Trust.

<sup>44</sup> 

	receive compensation through permanent or 30 year
	easements, or enter into a 10, 15, 20, or 30 year rental
	agreement.
Small Farms Program	"The South Carolina Department of Agriculture's
	Small Farms Program provides assistance to small
	family farmers. Special importance is placed on
	farmer owned marketing cooperatives; land retention,
	alternative land use and community development. The
	program also provides assistance with identifying and
	securing financial resources and locating profitable
	markets."
Conservation Reserve Program	This program is administered by the Farm Service
	Agency to encourage farmers to convert highly
	erodible cropland and other environmentally sensitive
	land to vegetative cover. Landowners may also
	receive funding to fence streams that exclude
	livestock and to build grass waterways. Eligible land
	must have a weighted average erosion index of eight
	or higher and been planted to an agricultural
	commodity four of the six previous years.
Conservation Security Program	This program was established in the 2002 Farm Bill to
	provide financial and technical assistance to support
	conservation efforts on tribal and private agricultural
	land. All privately owned land that meets established
	soil and water quality criteria is eligible.

The College of Agriculture, Forestry and Life Sciences at Clemson University has developed a series of web based videos that walk land owners through all aspects of Conservation Easements. Local Extension Offices are also valuable resources for the public and individuals interested in placing some protections on their land should utilize this resource. The videos can be found at:

http://www.clemson.edu/cafls/departments/forestry/conservation\_easements/index.html.

Another method of conserving land that has recently joined the conversation is the concept of transferring development rights. As a tool, transferring development rights consists of a conveyance of development rights by deed, easement, or other legal instrument, authorized by ordinance or regulation, to another parcel of land and the recording of that conveyance.<sup>5</sup> Programs establishing a mechanism for the transfer of development rights from one area are used to preserve land and allow for increased density in other areas of the jurisdiction. Developers are able to buy the right to develop from a property owner who then records a restriction on the property to prevent development. The developer is then rewarded by receiving additional density allotments and the developer is able to apply the number of dwelling units to a development in selected growth areas.

Oconee County should also work to establish a local conservation bank to help preserve and protect not only the areas natural resources but also those historical and cultural resources that are valuable links to the past. The establishment of a local conservation bank

<sup>&</sup>lt;sup>5</sup> Freilich, Robert H. and S. Mark White. 21<sup>st</sup> Century Land Development Code. Chicago, Illinois: American Planning Association. 2008.

will be an asset to all citizens of Oconee County. The conservation bank will be able to assist residents in exploring the advantages and disadvantages of having property conserved. At the same time the local conservation bank will be able to help raise the funds necessary to purchase conservation easements.

## Water Resources

Although Oconee County possesses a wide variety of natural resources, it is the area's waters that have traditionally set the county apart. From the farmlands in the south, to the mountains in the north, area residents have never been very far from one of the county's streams. In fact, all but a short length of the county's boundaries are marked by water. With an average annual precipitation ranked near the top of the nation, and a geology that favors water storage, it was perhaps inevitable that the resource played a major role in shaping the county as we know it today. It should be stressed, however, that though plentiful, Oconee County's supply of water is not unlimited.

Widespread concern about future water availability was brought to the fore by events that began in the late 1990's, which happened to be a sustained period of diminished rainfall. As drought increased, lake and stream levels fell to near-record lows, and a number of residents reported that wells were drying up. At the same time, it became known that large metropolitan areas in the region were actively seeking to permit the withdrawal of local surface waters to supply their own growing needs. To date, this issue is still open and ultimately in the hands of state and federal authorities, but many local leaders believe that further stressing Oconee County's reservoirs will inevitably limit the county's ability to chart its own future growth. Another concern noted during the period was the existence of uranium, in the form the radon, in Oconee's groundwater. Although potentially a serious problem, at present it is believed to be a very localized condition that may be dealt with on a case-by-case basis. Finally, Oconee's waters have been affected by increasing pressure from non-point source pollution resulting from poor agricultural practices, development, and increased population density. These factors, combined with a population that grew in excess of 15% during the 1990's, have made insuring sufficient water supplies for both consumption and use in economic development a major concern in Oconee County.

## Groundwater

While the groundwater in Oconee County is generally unconfined, local artesian conditions exist when wells penetrate fractures that are hydraulically linked with higher recharge areas. This may also be the case for clayey regolith that forms a confining unit. Typically, water enters the ground, percolating vertically downward through unsaturated materials. Once the water reaches a level of saturation, which is the water table, it moves laterally to seek a point of discharge. This is the source of springs, seeps, baseflow to streams, and seepage to lakes. While the water table may be near the surface in valleys or

lowlands, it can be tens to hundreds of feet below the surface of hills and mountains. (Groundwater Atlas of the United States, USGS)

Contrary to popular belief, most groundwater does not flow through underground streams, but seeps through layers of sand or cracked rocks. Because the water moves so slowly, it does not dilute or flush out pollutants very easily. Also, until the water reaches a well or emerges in a body of surface water, detecting pollution is extremely difficult; and by that time, remediation is both problematic and expensive. (Bureau of Water, South Carolina Department of Health and Environmental Control [DHEC])

The replenishment of groundwater supplies is an issue that must be dealt with in all developing areas, including Oconee County. As the amount of impervious surface increases, the amount of area available for recharging the groundwater system is decreased. Buildings, driveways, and paved roads all prevent rainwater from finding its way back into the ground. At the same time, water turned back from these structures greatly increases the amount of runoff that must be dealt with downstream, leading to increased amounts of flooding and property damage. In addition, damage to wetland areas, which also serve as key recharge areas, removes even more groundwater from the system, thereby further reducing the water available to supply new development.

Although pollutants are an increasing threat, the quality of raw groundwater in Oconee and the surrounding region has traditionally been considered suitable for drinking and other uses. Although fluoride, iron, manganese, and some sulfate can be found in the water, levels have rarely exceeded state and federal drinking-water standards (<u>Groundwater Atlas of the United States</u>, USGS). Recently, however, high levels of uranium and radon have been discovered in wells in various parts of Oconee County. At the time of writing, no organized program of response has been implemented.

## **Streams and Lakes**

The waters of many streams and lakes flow through Oconee County. The following is a list of some of the county's more significant waters.

- Lake Hartwell- Created by the impoundment of the Savannah River on the South Carolina/ Georgia border, this 56,000-acre body of water is one of the most popular recreational lakes in the United States. Lake Hartwell was completed in the early 1960's, and is utilized for hydroelectric power generation, flood control, recreation, and water supply.
- (2) Lake Keowee- This 18,372-acre lake was created when Duke Power Corporation dammed the Keowee and Little Rivers for power generation, and is situated on the border between Oconee and Pickens Counties. Its waters are also used for cooling the reactors of the Oconee Nuclear Station. Being located in the foothills, Keowee offers mountain vistas that greatly enhance traditional recreational activities with

beautiful scenery. As a result, the often steep slopes surrounding Lake Keowee are the site of some of the heaviest residential development in the county, leading to growing debate regarding the usage of the resource. The lake's waters are used for power generation, recreation, and water supply. It should be noted that some of Lake Keowee's waters are transferred out of basin by the City of Greenville, a point of growing concern among many of those living near the lake.

- (3) Lake Jocassee- Located in northeast Oconee along the county's border with Pickens County, Lake Jocassee's 7,565 acres of clear mountain waters are formed by the impoundment of the Toxaway, Whitewater, and Thompson Rivers. The lake, whose bottom lies approximately 324 feet below surface at its deepest point, was built by Duke Power Corporation for power generation soon after Lake Keowee was completed in the early 1970's. Lake Jocassee's natural shoreline is protected by both thousands of acres of public lands and extremely rough terrain.
- (4) Lake Yonah- Completed in 1925, Lake Yonah was constructed on the Tugalo River to generate hydroelectric power for the Georgia Power Company. Currently offering public access as at two relatively remote Georgia landings, public use of Lake Yonah has traditionally been relative light. In recent years, however, the 325-acre impoundment has been the scene of increased development, particularly on the Georgia side. Extremely steep terrain and an isolated location generally restricts public access on the Oconee side to boat and barge traffic.
- (5) Lake Tugalo- Located upstream from Lake Yonah, Lake Tugalo was one of a series of hydroelectric dams constructed in the early years of the twentieth century by Georgia Power Company. Lake Tugalo's 597 acres of water stretch along the South Carolina/ Georgia border from the end of Section 4 of the Wild and Scenic Chattooga River to its confluence with the Tallulah River.

In addition to the waters listed above, Oconee County's borders encompass a number of private lakes, with many of them home to a number of lakefront communities. Among these are:

- a. Lake Becky
- b. Lake Chattooga
- c. Lake Cheohee
- d. Lake Cherokee
- e. Crystal Lake
- f. Lake Jemiki
- g. Mountain Rest Lake
- h. Whitewater Lake

The following rivers and creeks are generally considered to be among Oconee County's most significant streams:

- (1) Chattooga River- Considered by many to be the jewel of natural resources in Oconee County, the Chattooga flows out of North Carolina and forms approximately 40 miles of border between South Carolina and Georgia. It is widely acclaimed to be one of the best whitewater rivers in the nation, with rapids ranging from Class III to Class V. The Chattooga, one of the first Wild and Scenic Rivers in the nation, attracts thousands of visitors to the county each year.
- (2) Tugalo River- Before the creation of Lakes Yonah, Tugalo and Hartwell, the Tugalo River (sometimes spelled Tugaloo) began at the confluence of the Chattooga and Tallulah Rivers and flowed southeastward to its confluence with the Seneca River, the beginning of the Savannah River. Though today's remaining short section of the river only flows out of Lake Yonah into the backwaters of Lake Hartwell, the Tugalo was once a main artery of travel and commerce for early residents of the region.
- (3) Chauga River- For years the Chauga has been overshadowed by the larger and more famous Chattooga River. Recently, however, the pristine Chauga has begun to attract its share of attention from both whitewater enthusiasts (who extol the river's Class V rapids) and conservationists. Approximately 14 miles of the river flow through U.S. Forest Service lands before entering developed areas near the headwaters of Lake Hartwell, the Chauga's ultimate destination.
- (4) Thompson River- Beginning in North Carolina, the Thompson flows south into Oconee County's Lake Jocassee. This remote river, which is noted for rugged terrain and beautiful waterfalls, supports a healthy population of native trout.
- (5) Coneross Creek- This stream stands as an example of intense utilization of a smaller water source by a significant portion of the county's population. The creek's waters are used as a water source for the town of Walhalla; drinking water for livestock all along its course; an irrigation source for various activities; a source for dilution of treated outfall from the Oconee Sewer Treatment Facility; hydroelectric power generation near Seneca; recreational fishing; and as it enters the backwaters of Lake Hartwell, boating. Beginning west of Walhalla near the base of Stumphouse Mountain, Coneross Creek flows generally southeast through the heart of what has come to be the most heavily developed section of the county, often suffering from the effects of both its usage and location. DHEC's Bureau of Water has listed 18.26 miles of the Coneross as being impaired from high levels of fecal coliform (see

Table NR-6). Among the sources of pollution noted by the agency are improperly operating septic tanks, land application of poultry litter, and access to the stream by livestock.

(6) Brasstown Creek- This stream flows out of Oconee's mountains through sparsely populated areas, eventually entering the Tugalo River. Noted as a good trout stream by area fishermen, Brasstown Creek flows over one of the more beautiful waterfalls in the region before passing through the Brasstown Creek Heritage Preserve, a habitat for several rare plants.

Other Oconee County streams worthy of note include:

- a. Whitewater River
- b. Little River
- c. Choestoea Creek
- d. Cheohee Creek
- e. Tamassee Creek
- f. Station Creek

# Water Classifications

The South Carolina Department of Health and Environmental Control's (DHEC) Bureau of Water is charged with identifying and classifying the surface waters of South Carolina. These classifications indicate the scope of allowable uses of the waters based on state regulations. Oconee County's classified waters fall into two categories:

(1) **Fresh Waters (FW)**-suitable for primary and secondary contact recreation and as a source for drinking water supply after conventional treatment in accordance with the requirements of DHEC. Also suitable for fishing, indigenous aquatic fauna and flora, and industrial and agricultural uses.

### (2) Trout Waters-

- a. **Natural (TN)** suitable for supporting reproducing trout populations and a cold water balanced indigenous aquatic community of fauna and flora, as well as uses listed in Fresh Waters.
- b. **Put, Grow, and Take (TPGT)** suitable for supporting growth of stocked trout populations and a balanced indigenous aquatic community of fauna and flora, as well as uses listed in Fresh Waters.

In addition to the classifications, the Bureau of Water enforces quality standards that strictly limit usage of the waters in such a manner as to maintain the classifications assigned to them. (SC Regulation 61-68: Water Classifications and Standards, DHEC)

Table NR-6 lists the classified waters in Oconee County. These range in size from the largest lakes to small creeks, but not all streams in the county are on the list. The state regulations governing the classifications and standards, however, apply to the listed stream and any unlisted tributaries.

Name	*Classification	Description
Bad Creek	ORW	All
Bad Creek Reservoir	FW	"
Battle Creek	TPGT	"
Bear Creek	TN	"
Bearcamp Creek	TN	"
Brasstown Creek	TPGT	"
Burgess Creek	TN	"
Camp Branch	FW	"
Cantrell Creek	TN	"
Chattooga River	FW	From confluence with Opossum Creek to Tugaloo River
Chattooga River	ORW	From NC state line to confluence with Opossum Creek
Chauga Creek (Jerry Creek)	FW	All
Chauga River	ORW	From headwaters to 1 mile above US 76
Chauga River	FW	From 1 mile above US 76 to Tugaloo River
Cheohee Creek	ORW	From Headwaters to end of US Forest Service land
Cheohee Creek	FW	From US Forest Service land to confluence with Tamassee Creek
Choestoea Creek	FW	All
Coneross Creek	FW	"
Corbin Creek	ORW	"
Dark Creek	ORW	"
Devils Fork Creek	TN	"
East Fork Chattooga River	ORW	Form NC state line to confluence with Indian Camp Branch
East Fork Chattooga River	TN	From confluence with Indian Camp Branch to Chattooga River
Fall Creek	FW	All
Fishtrap Branch	FW	"
Hartwell Lake	FW	"
Hemery Creek (Ramsey Creek)	FW	"
Howard Creek	ORW	From headwaters to .3 miles below Highway 130 above flow augmentation system at the Bad Creek Pumped Storage Station dam
Howard Creek	TN	From just above flow augmentation system at the Bad Creek Pumped Storage Station dam to confluence with Devils Fork Creek
Indian Camp Branch	ORW	All
Ira Branch	ORW	"
Jacks Creek	ORW	"
Jerry Creek- SEE CHAUGA CREEK		
Jumping Branch	TN	"
Keowee Lake	FW	"
King Creek	ORW	"
Knox Creek	FW	"
Lake Cheohee	FW	"
Lake Cherokee	FW	"

#### Table NR-6

Lake Jocassee	TPGT	"
Lake Tugaloo	TPGT	"
Lick Log Creek	FW	From headwaters though Thrift Lake
Lick Log Creek	ORW	From Thrift Lake to Chattooga River
Limber Pole Creek	TN	All
Little River	FW	"
Long Creek	FW	"
Martin Creek	FW	"
McKinney's Creek	TN	From headwaters to Highway 25
McKinney's Creek	FW	From Highway 25 to Lake Keowee
Mill Creek	TN	All
Moody Creek	TN	"
Moss Mill Creek	ORW	"
North Little River	TPGT	From confluence of Mill Creek and Burgess Creek to Highway 11
North Little River	FW	Highway 11 to confluence with Little River
Opossum Creek	FW	All
Pig Pen Branch	ORW	"
Pinckney Branch	FW	"
Ramsey Creek- SEE HEMEDY CREEK		
Reedy Branch	FW	"
Sawhead Branch	FW	"
Shoulderbone Branch	FW	"
Slatten Branch	ORW	"
Smeltzer Creek	TN	From headwaters to Highway 130
Smeltzer Creek	TPGT	From Highway 130 to North Fork of Little River
Swaford Crddk	TN	All
Tamassee Creek	ORW	From headwaters to end of US Forest Service land
Tamassee Creek	FW	From US Forest Service land to confluence with Cheohee Creek
Thompson River	TN	All
Tilly Branch	FW	"
Tugaloo River	FW	"
Turpin Branch	FW	"
Unnamed Creek	FW	Enters Little River at Newry
West Fork Townes Creek	TN	"
Whetstone Creek	TN	"
White Oak Creek	TN	From headwaters to Knox Creek
Whitewater River	ORW	From NC state line to Lake Jocassee
	UKW	FIGHTING STATE THE TO LAKE JOCASSEE

\*FW = Fresh Water; TN = Natural Trout Waters; ORW = Outstanding Resource Waters Source: South Carolina Regulation 61-69: Classified Waters, DHEC

## Watersheds

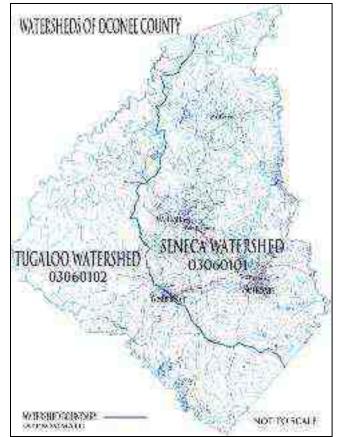
A watershed is a geographic area into which the surrounding waters, sediments, and dissolved materials drain. The edge of a particular watershed extends along the peak of surrounding topographic ridges, directing all surface runoff within the boundary back into the streams of the watershed. Many watersheds often cover large regions, spreading over many thousands of acres. As a result, it is not uncommon for a single watershed to be crossed by a number of counties lying in different states, making it convenient for various governmental entities within the watershed to coordinate in approaching shared issues. The individual watersheds are designated by the United States Geological Survey (USGS), a division of the United States Department of the Interior.

Oconee County crosses two major watersheds, the Tugaloo Watershed (USGS Cataloging Unit #03060102) and the Seneca Watershed (USGS Cataloging Unit #03060101).

The two then empty into the Upper Savannah River Watershed. The upper reaches of the Tugaloo Watershed lie in the southern Appalachian Mountains, with approximately 977 square miles encompassed within the borders. The total perimeter measures approximately 200 miles. Counties crossing the watershed include Clay, Jackson, and Macon in North Carolina; Franklin, Habersham, Hart, Rabun, Stephens, and Towns in Georgia; and Anderson and Oconee in South Carolina. There are approximately 1,274 river miles, as well as 82 lakes totaling 22,655 acres, within the watershed. See Figure NR-2.

As noted above, the other watershed crossed by Oconee County is the Seneca Watershed. Like the Tugaloo Watershed with which it shares its western border, the upper reaches of the Seneca Watershed lie in the Southern Appalachian Mountains, and encompasses approximately 1,024 square miles. The watershed is crossed by Jackson and Transylvania Counties in North Carolina; and Anderson, Oconee, and Pickens Counties in South Carolina. The approximately 160-mile perimeter encloses 123 lakes totaling almost 38,940 acres. See Figure NR-2.

### Figure NR-4



Source: Oconee County Planning Department

# Water Supplies

The United States Environmental Protection Agency (EPA) rates Oconee County's watershed health as very good, with water quality being seen to have a "Low Vulnerability" to threats. At the present time, therefore, county residents relying on community water systems are supplied with an abundant supply of raw water for treatment by water systems. As growth continues near the most sensitive waters, however, chances for damage will increase. This is particularly true for areas with steep slopes and thin soils. Those relying on private wells for their water supply are in similar circumstances, for while most wells offer safe water supplies, highly developed areas offer increased chances of impaired water quality.

## **Impaired Waters**

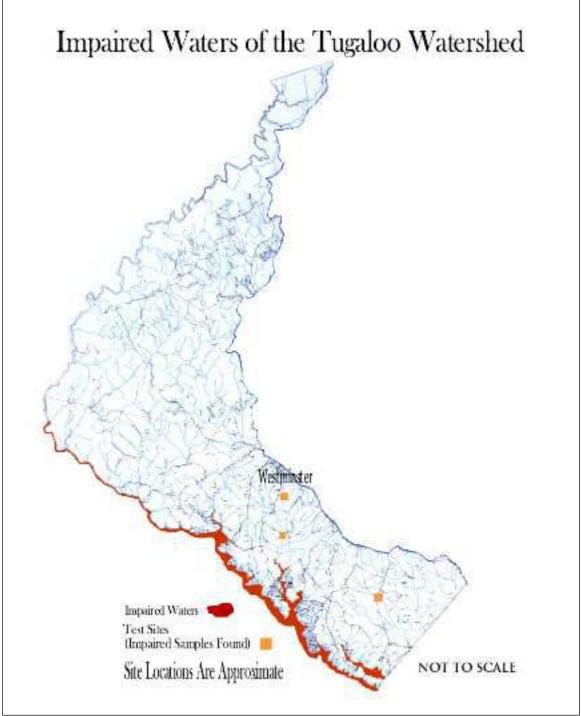
The EPA lists waters that are considered to be impaired in quality under the Clean Water Act. Those that flow through Oconee County are listed in Table NR-6.

### Table NR-7

Clean Water Act Section 303(d) Impaired Waters in Oconee County			
Name	ID	Concern	
Lake Hartwell (All)	SC-FCA-9995-1998	PCB's	
Lake Hartwell (Seneca River Arm at Buoy B/W MKRS S- 28A & S-29)	SC-SV-288-1998	Copper	
Choestoea Creek (At S-37-49)	SC-SV-108-1998	Pathogens	
Norris Creek (At S- 37-435)	SC-SV-301-1998	Pathogens	
Beaverdam Creek (At S-37-66)	SC-SV-345-1998	Macroinvertebrate/Pathogens	
Coneross Creek (At SC 59)	SC-SV-004-1998	Pathogens	
Coneross Creek (At S-37-54)	SC-SV-333-1998	Pathogens	
Lake Keowee (Cane Creek Arm)	SC-SV-311-1998	Zinc	
Lake Jocassee (At confluence of Thompson and Whitewater Rivers)	SC-SV-336-1998	Copper	
Lake Keowee (Above SC 130)	SC-SV-338-1998	Copper	
Cane Creek (At S-37- 133)	SC-SV-342-1998	Pathogens	
Little Cane Creek (At S-37-133) Source: EPA (2000)	SC-SV-343-1998	Pathogens	

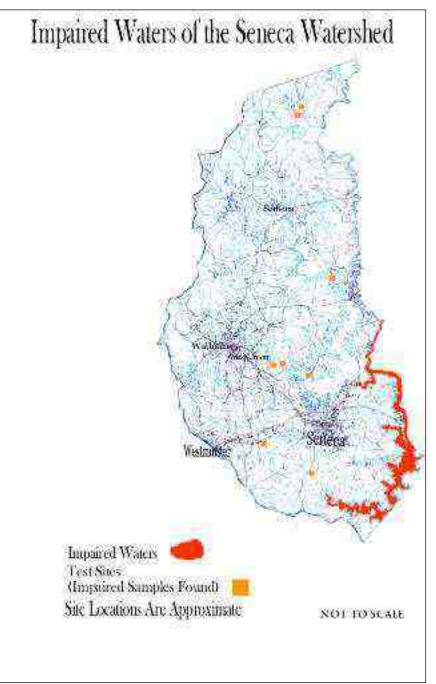
Source: EPA (2000)

Figures NR-3 and NR-4 graphically illustrate the location of the various impaired waters noted in Table NR-6.



Source: Oconee Planning Department

Figure NR-6



Source: Oconee Planning Department

## **Flora and Fauna**

Oconee County is home to a tremendous variety of plants and animals. Because much of northern and western Oconee County is located in the edge of the southern Appalachian Mountains, many life forms not typically found in most other areas of the state may be found there; yet, in the southern end of the county one can find a mix plants and animals typical of what might be seen throughout the rest of piedmont South Carolina. And, as might be expected, the foothills area separating the mountains and piedmont areas offers habitats sometimes acceptable to plants and animals from both regions.

When Europeans first settled in what is today's Oconee County, the forests were primarily comprised of hardwoods interspersed with various stands of softwoods. As the hardwood forests were cleared for limber, farming and other uses, lands allowed to grow back were often taken over by the faster growing softwoods, particularly pines, permanently altering the character of the region. Today, in the piedmont section of the county the most important trees include: loblolly pine; shortleaf pine; Virginia pine; red cedar; yellow poplar; sweetgum; cottonwood; blackgum; ash and oak. In the mountainous forests the dominant trees include white pine; pitch pine; shortleaf pine; Virginia pine; hemlock; red cedar; various oaks; black walnut; and yellow poplar. (<u>Soil Survey of Oconee County</u>) In 1990, over 268,000 acres of Oconee County were counted as forestland. (South Carolina Statistical Abstract)

Many Oconee residents are avid sportsmen, particularly devoting large amounts of time and money to the pursuit of hunting and fishing. Among the game animals found in the county include whitetail deer, wild turkey, rabbits, squirrels, doves, and quail. Black bear and wild boars are hunted in the mountainous areas. In addition, a few individuals remain devoted to the traditional sports of hunting raccoon and opossum. Also, Oconee County fishermen pursue a variety of species, including bass, trout, crappie, bream, and catfish. Many state record fish have been taken from Oconee waters. Of particular note among county lakes in recent years has been Lake Jocassee, the source of quite a few record-setting trout. Mention must also be made of Oconee's cold, pristine streams, home to a number of trout populations, both stocked and native.

Oconee County's sparsely populated remote areas often act as a haven for plants and animals long gone from more developed areas. As a result, Oconee County is widely recognized as a special environment, providing habitats unavailable in most other regions. Table NR-7 provides an inventory of Oconee County's rare, threatened and endangered plants and animals listed by the South Carolina Department of Natural Resources.

Table NR-8

Rare, Threatened & Endangered	Species found in O	conee County (Upd	lated 03/28/01)
Common Name <sup>1</sup>	Global Rank <sup>2</sup>	State Rank <sup>3</sup>	Legal Status <sup>4</sup>
Cooper's Hawk	G5	S?	SC
Striped Maple	G5	S1S2	SC
Blue Monkshood	G4	S2	SC
Brook Floater	G3	S?	SC
Nodding Onion	G5	S?	SC
Smooth Indigobush	G4?	S?	SC
Green Salamander	G3G4	S1	SC
Pipevine	G5	S2	SC
Single-Sorus Spleenwort	G4	S1	RC
Black-Stem Spleenwort	G5	S1S2	SC
Walking-Fern Spleenwort	G5	S2	SC
Maidenhair Spleenwort	G5	S?	SC
Georgia Aster	G2G3	S?	SC
New England Aster	G5	S?	SC
Yellow Birch	G5	S?	SC
Brook Saxifrage	G4	S1	SC
Mountain Bitter Cress	G2G3	S?	SC
Divided Toothwort	G4?	S?	SC
Narrowleaf Sedge	G5	S?	SC
Fort Mountain Sedge	G3	S?	SC
Appalachian Sedge	G4	S?	SC
South Carolina Sedge	G4	S?	SC
Biltmore Sedge	G3	S1	NC
Graceful Sedge	G5	S?	SC
Manhart Sedge	G3	S?	SC
Eastern Few-Fruit Sedge	G4	S?	SC
Longstalk Sedge	G5	S1	SC
Plantain-Leaved Sedge	G5	S?	SC
Drooping Sedge	G4	S?	SC
Rough Sedge	G5	S?	SC
Tussock Sedge	G5	S?	SC
Pretty Sedge	G4	<u> </u>	SC
Scarlet Indian-Paintbrush	G5	<u>S?</u> S2	RC
Blue Cohosh	G4G5	<u>S2</u> S2	SC
	G1	<u>S2</u> S1	SC
Evan's Cheilolejeunea Southern Broadleaf Enchanter's Nightshade	G5	S1 S?	SC
0			
Enchanter's Nightshade	G5T5	S1	SC
Southern Red-Backed Vole	G5	S2S3	SC
Carolina Red-Backed Vole	G5T4	\$2\$3	SC
Whorled Horse-Balm	G3	S?	SC
Rafinesque's Big-Eared Bat	G3G4	S2?	SE
Hellbender	G4	S?	SC
Large Yellow Lady's-Slipper	G5	S?	SC
Bulblet Fern	G5	S?	SC
Lowland Brittle Fern	G5	S?	SC
Seepage Salamander	G3G4	S?	SC
Wild Bleeding-Heart	G4	S?	SC
Umbrella-Leaf	G4	S1	RC
Glade Fern	G5	S1	SC
Goldie's Woodfern	G4	S1	SC
Evergreen Woodfern	G5	S?	SC
Smooth Coneflower	G2	S1	FE/SE
Yellow Lance	G2G3	S?	SC
Wahoo	G5	S1	SC
Hollow Joe-Pye Weed	G5?	S?	SC
Mountain Witch-Alder	G3	S1	RC
Showy Orchis	G5	S?	SC
Teaberry	G5	S1	SC
Black Huckleberry	G5	S?	SC
Virginia Stickseed	G5	S?	SC
Liverleaf	G5	S?	SC
Little-Leaved Alumroot	G4	S?	SC
Little-Leaved Alumroot	64	5!	SC

American Water-Pennywort	G4	S?	SC
Small Whorled Pogonia	G2	S1	FT/ST
Butternut	G3G4	S?	SC
Naked-Fruited Rush	G4	S?	SC
Woods-Rush	G5	S?	SC
Ground Juniper	G5	S?	SC
False Dandelion	G3	S?	SC
Large Twayblade	G5	S?	SC
Kidney-Leaf Twayblade	G4	S?	SC
Yellow Honeysuckle	G5?	S2	SC
Climbing Fern	G4	S1S2	SC
Fraser Loosestrife	G2	S152	RC
Canada Moonseed	G5	S?	SC
Two-Leaf Bishop's Cap	G5	S?	SC
Oswego Tea	G5	S?	SC
Sweet Pinesap	G3	S1	RC
Eastern Small-Footed Myotis	G3	S1	ST
Little Brown Myotis	G5	\$3?	SC
Northern Myotis	G4	\$3\$4	SC
Indiana Myotis	G2	S1	FE/SE
Eastern Woodrat	G5	S3S4	SC
Southern Appalachian Woodrat	G5T4Q		SC
Nestronia	G4	S2	SC
Adder's-Tongue	G5	S?	SC
One-Flowered Broomrape	G5	S?	SC
Hairy Sweet-Cicely	G5	S?	SC
Outcrop	G?	S?	SC
Allegheny-Spurge	G4G5	S1	RC
American Ginseng	G3G4	\$1 \$2\$3	RC
Hairy-Tailed Mole	G5	S?	SC
Kidneyleaf Grass-of-Parnassus	G4	S1	RC
Purple-Stem Cliff-Brake	G5	S1 S1	RC
Fernleaf Phacelia	G5	S1 S1	SC
Streambank Mock-Orange	G5	<u>S1</u> S?	SC
Gorge Leafy Liverwort	G2		SC
Mountain Wavy-Leaf Moss	G3	S?	SC SC
Gay-Wing Milkwort	G5 G5	<u>S1</u> S?	SC SC
Pickerel Frog			SC
Wood Frog	G5 G5	S3 S1	SC SC
Blacknose Dace Large-Leaved Mnium	G5	S1 S?	SC SC
Catawba Rhododendron	G5	S?	
	G2 G2	S? S1	SC NC
Sun-Facing Coneflower			
Large-Fruited Sanicle	G4	S1	SC
Lettuce-Leaf Saxifrage	G5	S?	SC
Oconee-Bells	G2	S2	NC
White Goldenrod	G5	S1	SC
Cinereus or Masked Shrew	G5	S?	SC
Pygmy Shrew	G5	S4	SC
Eastern Spotted Skunk	G5	S3S4	SC
Clingman's Hedge-Nettle	G2Q	S1	SC
Broad-Toothed Hedge-Nettle	G5T4T5	S1	SC
Mountain Camellia	G4	S2	RC
Swamp Rabbit	G5	S3	SC
New England Cottontail	G4	S2?	SC
Red Squirrel	G5	\$3?	SC
Soft-Haired Thermopsis	G4?	S?	SC
Heart-Leaved Foam Flower	~	69	SC
Carolina Tassel-Rue	G5T5	S?	
	G5	S?	SC
Bristle-Fern	G5 G4	<u>S?</u> S1	SC RC
Bristle-Fern Dwarf Filmy-Fern	G5 G4 G4G5	S? S1 S2	SC RC RC
Bristle-Fern Dwarf Filmy-Fern Faded Trillium	G5 G4 G4G5 G3	S?         S1           S2         S?	SC RC RC SC
Bristle-Fern Dwarf Filmy-Fern Faded Trillium Large-Flower Trillium	G5 G4 G4G5 G3 G5	S?           S1           S2           S?           S?	SC RC RC SC SC SC
Bristle-Fern Dwarf Filmy-Fern Faded Trillium Large-Flower Trillium Persistent Trillium	G5 G4 G4G5 G3 G5 G1	S?           S1           S2           S?           S?           S?           S1	SC           RC           RC           SC           SC           FE/SE
Bristle-Fern Dwarf Filmy-Fern Faded Trillium Large-Flower Trillium	G5 G4 G4G5 G3 G5	S?           S1           S2           S?           S?	SC RC RC SC SC SC

Painted Trillium	G5	S?	SC
Nodding Pogonia	G4	S2	SC
Barn-Owl	G5	S4	SC
American Bog Violet	G5T5	S?	SC
Yellow Violet	G5	S?	SC
Three-Parted Violet	G5	S?	SC
Three-Parted Violet	G5T?	S?	SC
Three-Parted Violet	G5T3?	S?	SC
Piedmont Strawberry	G2	S2	RC
Waterfall	G?	S?	SC
Eastern Turkeybeard	G4	S1	SC
Meadow Jumping Mouse	G5	S?	SC

<sup>1</sup>Reference *South Carolina Rare, Threatened & Endangered Species Inventory* (S.C. Dept. of Natural Resources) for scientific name

<sup>2</sup>Global Rank- Degree of endangerment world-wide (The Nature Conservancy)

- G1: Critically imperiled globally because of extreme rarity or because of some factor(s) making it especially vulnerable to extinction
- G2: Imperiled globally because of rarity or factor(s) making it vulnerable
- G3: Either very rare throughout its range or found locally in a restricted range, or having factors making it vulnerable
- G4: Apparently secure globally, though it may be rare in parts of its range
- G5: Demonstrably secure globally, though it may be rare in parts of its range
- GH: Of historical occurrence throughout its range, with possibility of rediscovery
- GX: Extinct throughout its range
- G?: Status unknown
- <sup>3</sup>State Rank- Degree of endangerment in South Carolina (The Nature Conservancy)
- S1: Critically imperiled state-wide because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation
- S2: Imperiled state-wide because of rarity or factor(s) making it vulnerable
- S3: Rare or uncommon in state
- S4: Apparently secure in state
- S5: Demonstrably secure in state
- SA: Accidental in state (usually birds or butterflies that are far outside normal range)
- SE: Exotic established in state
- SH: Of historical occurrence in state, with possibility of rediscovery
- SN: Regularly occurring in state, but in a migratory, non-breeding form
- SR: Reported in state, but without good documentation
- SX: Extirpated from state
- S?: Status unknown

<sup>4</sup>Legal Status

- FE: Federal Endangered
- FT: Federal Threatened
- PE: Proposed for Federal listing as Endangered
- PT: Proposed for Federal listing as Threatened
- C: Candidate for Federal listing
- NC: Of Concern, National (unofficial- plants only)
- RC: Of Concern, Regional (unofficial- plants only)
- SE: State Endangered (official state list- animals only)
- ST: State Threatened (official state list- animals only)
- SC: Of Concern, State
- SX: State Extirpated

Source: South Carolina Rare, Threatened & Endangered Species Inventory: Species Found in Oconee County (S.C. Dept. of Natural Resources)

## Water 2016 Update

Water availability is closely related to the climate of a particular area. However, the cost of producing clean drinking water is dependent on water availability and the amount of pollution existing in the water. Water is a problem, not only in Oconee County but all

around the world. Part of the reason for this is that most of the earth's water is contained in the oceans, while only three percent is fresh water. Of that three percent, the vast majority is found in the icecaps and glaciers. Surface water makes up only 0.9 % of the earth's water resources, and yet is the resource used for most of the drinking water in our region.

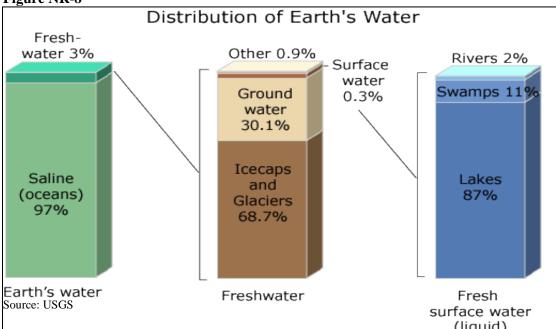


Figure NR-8

<u>The United States is blessed to have an abundance of available drinking water. However, the</u> Southeastern part of the country has had a drought that has been looming over the region. The amount of rainfall in the region has been considerably low in recent years. Lake levels have dropped to as low as thirty feet, leaving quite an impression! Relics of yester years have emerged briefly, revealing what once was. The visibility of the drought has had led to an increasing concern over the last several years over the lack of water in the region. Drought conditions have become quite severe, impacting individuals, agriculture, the local economy and the environment. Farmers have been forced to purchase hay from other regions or sell some of their stock due to the lack of rain. The tourist industry has also been affected by the drought with the closing of marinas and boat ramps.

Drought is a natural event which occurs over a period of time with less than normal rainfall. Many ways of measuring a drought have been developed in the United States, which adds to the difficulty of defining and quantifying its occurrence. Two of the more common drought indices are the Palmer Drought Severity Index (PDSI) and the Standardized Precipitation Index (SPI). The Palmer Drought Severity Index considers water supply (precipitation), demand (evaporation), and loss (runoff). On the other hand, the Standardized Precipitation Index considers only precipitation. In both indices, a negative number indicates drought and a positive number represents wet conditions.

Similarly, the South Carolina Water Plan<sup>6</sup> defines a "drought as a period of diminished precipitation that results in negative impacts upon the hydrology, agriculture, biota, energy, and economy of the State." The plan also categorizes droughts into three categories. A meteorological drought is simply a period of time in which there is less rainfall than the average over the given time interval. An agricultural drought causes real damage to the areas crops and farmland. "This type occurs when soil moisture availability to agricultural crops is reduced to a level causing adverse effects on the agricultural production of a region."<sup>7</sup> The final classification of drought is a hydrological drought which is signified by a shortage of water in steams, lakes, and ground water supplies.<sup>8</sup> During the past five years, we have been experiencing all three classifications of drought in our area. In 2009, increasing rainfall has filled up the lakes and returned water tables to pre-drought conditions.

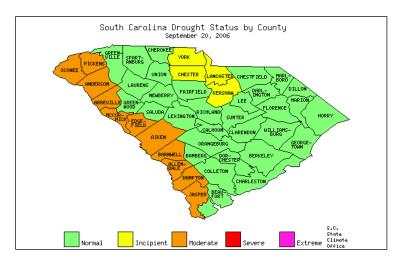
In Oconee County, from September of 2016 till the present, the rainfall has been near normal according to the Palmer Drought Index, computed by the Regional Drought Monitor (SC State Climatology Office).

<sup>&</sup>lt;sup>6</sup> <u>South Carolina Water Plan.</u> Second Edition. South Carolina Department of Natural Resources: Land, Water, and Conservation Division. January 2004.

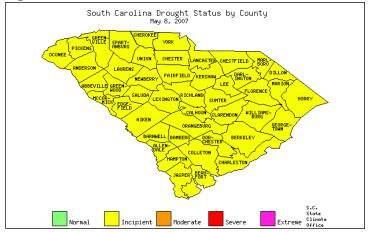
<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Ibid.

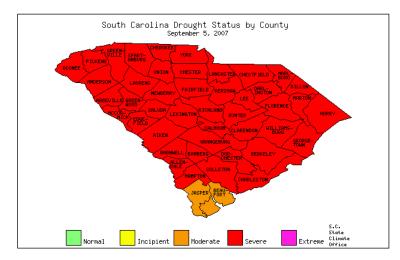
### Figure NR-9



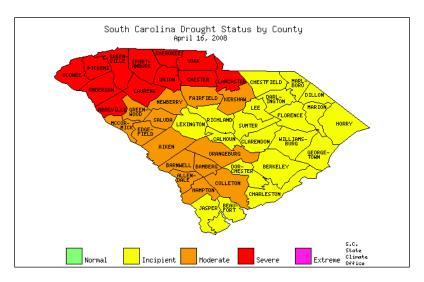
### Figure NR-10



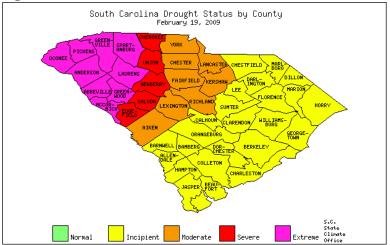
### Figure NR-11



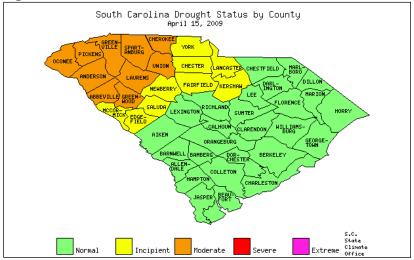
### Figure NR-12



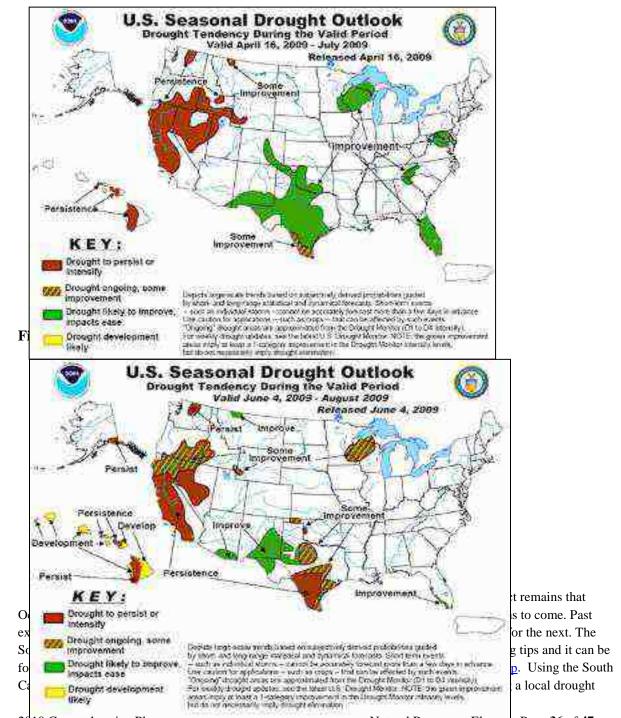




#### Figure NR-13



The latest drought map shows the recent rains have improved conditions. What these maps are not showing is that the region is just beginning the "dry" season and if the rain pattern of the previous years hold, we will quickly move back into a severe or extreme drought. However, other sources also indicate that the drought status is improving. According to the National Weather Service Climate Prediction Center, drought conditions are expected to improve in the region just to our north.



### Figure NR-14

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management plan. "A drought management plan outlines a comprehensive program of action that enables communities to recognize and deal with drought. . . An effective plan provides for monitoring water supplies and uses; identifying alternative water sources, including any arranging hookups to neighborhood water supplies; developing education programs and demand reduction strategies; defining implementation and enforcement mechanisms; and outlining review and update procedures."<sup>9</sup> Having a document of this nature will aid local officials in dealing with major drought events in the future.

Water can no longer be taken for granted in South Carolina and Oconee County. With the overwhelming presence of water in our county it is easy to take the availability of water for granted but if those resources are allocated to others, Oconee County may be left wanting. The State's water plan sets out to answer the question: "what steps should the State take now to ensure that adequate amounts of water will be available in the future?" Oconee County must not only ask this question, we must answer it and act to ensure that adequate water is available for generations to come. South Carolina's water falls under the Public Trust doctrine which means water is too important to be owned by any one person. Therefore, we must work to manage our water resources so that all those involved will access to the water they need. This will mean that during drought conditions that all users share in reducing daily usage.

Water quality is vital to the long term health of the region and worthy of our best efforts to ensure safe, clean water for generations to come. Over the past decade there have been approximately 1000 new residential homes (mobile homes and stick built) per year added to the tax roles. (In the early part of the decade, mobile homes made up a larger portion of the new residences in the county; however lending laws changed and the percentage of mobile homes added to the tax roles decreased significantly.) The average household water usage per day is 350 gallons of water. This means that over the past 10 years, without considering industry, schools, and commercial increases in water usage, the County has increased its water usage by 3,500,000 gallons per day by simply supplying homes with water! The time to preserve water is now, before it is too late!

However, water quantity is also very important in the life of the county. Well placed and sufficient infrastructure preserves natural lands by limiting the areas where development can readily go, thus protecting the natural environment. Public waters systems do more than just provide safe drinking water to businesses and homes. When public water is available with the proper amount of water flow, fire insurance rates will decrease. According to Dennis Gage, the manager of the Natural Hazards Mitigation Division, "communities that don't have a public water system can still obtain a good fire suppression classification system from the Insurance Services Office (ISO) by using alternative water sources and proper delivery of equipment."<sup>10</sup> However, for a community to get credit it must have documented permission to use the water source, an all- weather access road to the fill site capable of supporting the

<sup>&</sup>lt;sup>9</sup> SC Department of Natural Resources. "The South Carolina Drought Response Program".

<sup>&</sup>lt;sup>10</sup> Gage, Dennis. "No Hydrants Required." Firechief. Penton Media. 1 Nov. 2001. [Accessed online] <u>http://firechief.com/mag/firefighting\_no\_hydrants\_required/</u>. April 28, 2009.

responding fire apparatus, access to the water during freezing weather, ability to draft water 365 days a year, documentation that water can withstand a 50 year drought, and documentation that the water supply has a capacity to support a minimum draw of 250 gallons per minute for two hours (minimum of 30,000 gallons).<sup>11</sup> Water resources should be used and devoted to ensuring that adequate fire protection is available throughout the county. Continuing to strategically place water tanks and dry hydrants in rural areas is one way of serving the citizens. Developers also have a role to play if they develop in areas that have no public water. They need to incorporate into their development plans adequate water quantities to provide fire protection. During times of drought, water storage facilities and dry hydrants should be checked regularly and adjustments made accordingly.

The Oconee Soil and Water Conservation District and the USDA-Natural Resources Conservation Service state that great strides have been made and continue to be made in the protection and improvement of water quality as compared to previous decades. Federal and State cost share programs and grants encourage the implementation of conservation practices which protect water such as livestock exclusion from natural water bodies, the maintenance of natural vegetative buffers along stream corridors, and appropriate application and timing of nutrients and pesticides in agricultural fields. Water quality and water conservation practices will continue to receive emphasis in technical and financial assistance programs, because the demand for clean, reliable sources of water will increase as the population increases. Since the misuse and pollution of water is easily observable, insuring the protection of water will remain at the forefront of public concern.

The State's water plan states that two of the most important elements in water resource management are knowing how much water is available and knowing how much is being used. We agree. Oconee County can begin to ensure the most effective use of its water resources by conducting a comprehensive water study for our area. This study should strive to answer how much water is available, how is it currently allocated, how much is available for future allocation, and at what point during drought conditions will all users need to be on water restrictions. When resources are becoming scare everyone must share the burden of conservation; including those permits that take water out of one basin into another. A flow rate analysis should also be part of this study for all water coming into Oconee County. Answering the question of how much water is available in Oconee will allow us to ensure state and federal regulations are being followed. Of course the man made lakes in the region contain large portions of the available water. The following table shows the surface area and volume of Lake Hartwell, Keowee, and Jocasse. The second table shows an estimated amount of surface water area in Oconee County.

<sup>&</sup>lt;sup>11</sup> Ibid.

Table NR-9					
State Rank	Lake	Drainage Basin	Lake Operator	Surface Area (acres)	Volume (acre-feet)
1	Hartwell	Savannah	Corps of Engineers	56, 000	2,549,000
6	Jocassee	Savannah	Duke Power	7,565	1,185,000
8	Keowee	Savannah	Duke Power	18,372	1,000,000

Source: South Carolina Water Plan 2006

#### Table NR-10

Lakes	Oconee County	Anderson County	Pickens County
Jocassee	5,310		2,043
Keowee	13, 102		5,270
Hartwell	11,632	23,633	1,590
Tugaloo	225		
Yonah	160		
Secession		244	
Broadway		640	
Russell		800	
Total Acreage	30,489	25,317	8,903

Any study undertaken to answer how much water is available to meet all the needs of the area must take into account evaportranspiration. As surface area increases, evaporation also increases. Water lost to the atmosphere should still be thought of a type of withdrawal because water is removed from the lake and does not enter the downstream system. Any allocation mechanism must include in the 100- day withdrawal-volume calculation an estimation for water lost due to evaporation.

A monitoring system must be developed if we are to accurately gauge the quantity of water. Without accurate data on how much water is available, no water resource management program can be successful.<sup>12</sup> Currently, there is only one monitoring station in Oconee County. South Carolina's water plan also states that having an adequate number of properly located gauges is vital to the effectiveness of the monitoring network, but it is also very important that these gauges are continuously operated at the same location for a long period of time. With only one station, it will be difficult to monitor the water resources in the County like they should be. Therefore, Oconee County should work with Federal and State agencies to develop a stream monitoring system that will track the available quantity and quality of the water in the major streams and rivers in the County.

The establishment of a county wide monitoring system will provide the data we need to have to determine the appropriate allotments of water. Once this is established, the county will be able to acquire an accurate 7Q10 for Oconee County that will facilitate monitoring the flow of water leaving the County. The 7Q10 is defined "as the lowest mean streamflow over seven (7) consecutive days that can be expected to occur in a ten (10) year period. In any year, there is a ten percent (10%) probability that the average flow for seven (7)

<sup>&</sup>lt;sup>12</sup> <u>South Carolina Water Plan.</u> Second Edition. South Carolina Department of Natural Resources: Land, Water, and Conservation Division. January 2004.

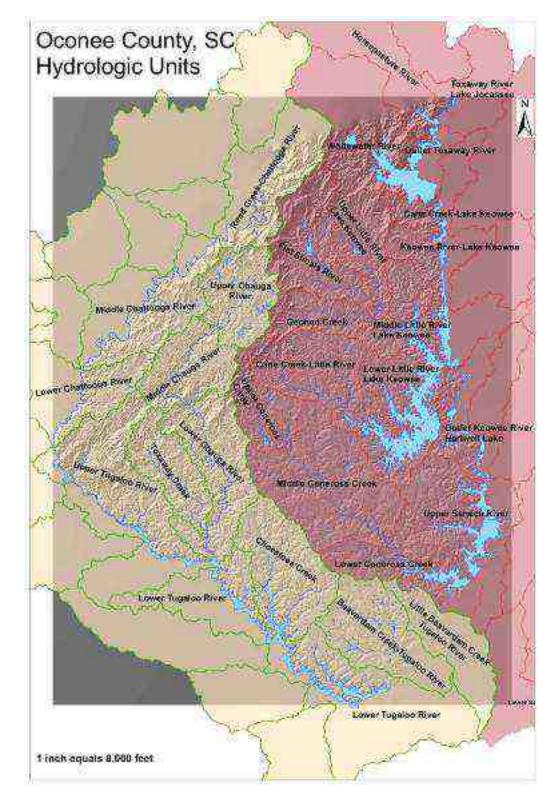
consecutive days will be equal to or less than the 7Q10."<sup>13</sup> If stream flows for seven days reach the defined 7Q10, water availability would be in jeopardy if all the water is allocated. The problem would increase exponentially if the assumptions that have been made on the quantity of water in Oconee County exceed the 7Q10. As the State Water Plan states, we need to know what flow levels are required in our streams to protect public health and safety, maintain fish and wildlife, and provide recreation, while promoting aesthetic and ecological values. The minimum required flows that need to be maintained will provide for the protection of water quality (is there enough water to adequately dilute pollution?); protect fish and wildlife (is there enough water for wildlife to survive?); maintain navigability (if water course is navigable, what is the minimum amount of water needed to maintain navigability?).

Water quantity and water quality go hand in hand. Oconee County not only needs to protect the quantity of the region's water but also the quality. What good is it to have a large quantity of water that is too polluted to use. County Council has put in place a vegetative buffer of twenty-five feet around the major lakes of the region. A natural buffer helps to maintain water quality by filtering water before it reaches the lake. Some argue that twenty five feet is not enough to achieve the desired results and would like to see a buffer closer to fifty or seventy five feet. If we are serious about the quality of our region's water, a discussion of increasing the buffer will need to take place. This discussion must include applying this buffer to all properties along the lake front so that there is not a patch work of natural buffers along the shore line. Buffers will work if everyone contributes. Other methods of ensuring water quality occur through soil conservation and best management practices that include the minimization of fertilizer use on domestic lawns and golf courses. Another avenue for increasing the quality of water in the region's lakes is to provide more boat dump stations on the lakes. Possible sites may include county maintained parks and landings, which currently have no boat dump stations. Any water plan for Oconee County needs to address the quality of the area water and provide common sense measures for improving the area's water resources.

<sup>13</sup> Ibid

The following map identifies all the sub-basins in Oconee County that would need to be considered when this study is undertaken:

#### Figure NR-16



### **Unique Natural Resource-Based Recreational Opportunities**

Recreational activities have become a significant part of Oconee County's economic life in recent years. While it is true that many other counties and cities across the nation have experienced similar trends, the changes in Oconee seem to have come about with less effort and expense than has been the case in many other places. For, unlike those areas that rely on manmade amusement activities to attract crowds, Oconee's recreational pursuits tend to center on its natural assets. Unfortunately, however, because these assets have too often been taken for granted, litter, vandalism, and pollution have occasionally threatened what is now an integral part of the Oconee County economy and lifestyle. Increasingly, however, attention is being focused on such issues, raising hopes for the future of Oconee's natural resources. If successful, such efforts will insure that the benefits of the county's natural assets will be enjoyed by many generations of Oconee County residents to come.

Perhaps Oconee County's best-known unique recreational resource is the Wild and Scenic Chattooga River. The river, which gained international attention during the 1970's as the backdrop for the movie "Deliverance", has attracted many thousands of individuals to the area in the last several decades. The stream has also led to the development of a small industry centered on whitewater sports, with a number of companies offering the public a chance to experience adventurous outdoor activities in Oconee. As a result, the county has experienced a significant economic boost from the river-related activities, with many unrelated businesses benefitting from the increased traffic.

Due to the combination of steep terrain and abundant streams, Oconee County boasts a wonderful collection of waterfalls. Although many guidebooks list up to eighteen of the more prominent ones, many smaller unnamed, yet beautiful, waterfalls may be found throughout the county. The better known Oconee waterfalls include:

- (1) Whitewater Falls- When taken as a unit, this series of six waterfalls located on the border of Oconee County and North Carolina comprises the highest series of waterfalls in eastern North America. Although the North Carolina's upper falls section is easily accessible more frequently visited, Oconee's Lower Whitewater Falls offers visitors a spectacular view of the Whitewater River cascading over a drop of 200 feet.
- (2) Issaqueena Falls- Located above Walhalla near another Oconee attraction, the Stumphouse Tunnel, this easily accessible 100-foot waterfall is one of the most popular waterfalls in the region.
- (3) Station Cove Falls- This stepped waterfall, located in the Tamassee area, has a listed height of 60 feet. An added attraction to the waterfalls is the number of wildflowers and native plants growing in the area.

- (4) Yellow Branch Falls- Accessible from the Yellow Branch Picnic Area off of Highway 28, this 50-foot vertical waterfall has often been overlooked in favor of those easier to reach. Recent trail improvements, however, have made Yellow Branch Falls potentially one of the most popular in the area.
- (5) Chauga Narrows- Seen by some as a waterfall, by others as a difficult whitewater rapid, the Chauga Narrows is a 25-foot drop of the Chauga River spaced within 200 feet. The Narrows is located in the Whetstone area.
- (6) Brasstown Falls- Situated to the west of Westminster on Brasstown Creek, this waterfall is composed of a series of drops over which the stream descends 120 feet.

Other named waterfalls include:

- a. Opossum Creek Falls
- b. Long Creek Falls
- c. Fall Creek Falls
- d. Riley Moore Falls
- e. Blue Hole Falls
- f. Lee Falls
- g. Licklog & Pigpen Falls
- h. Big Bend Falls
- i. Miuka Falls
- j. King Creek Falls
- k. Spoon Auger Falls
- l. Bee Cove Falls

Oconee County also offers a variety of other unique natural features. Scenic vistas can be found at many points throughout the mountainous areas of the county. Hikers can choose from many miles of trails, ranging in difficulty from easy nature trails to the challenging Foothills Trail, which spans 85 miles between Oconee State Park and Jones Gap State Park, in Greenville County, SC. Camping is available all across the county, with campsites available at state and county parks, Corps of Engineers campgrounds, designated Forest Service areas, and privately owned facilities. For the less adventurous, both the Savannah River Scenic Highway and the Cherokee Foothills Scenic Highway begin in Oconee County, providing motorists and bicyclists many miles of picturesque travel.

### Analysis

Oconee County's natural resources have played a major role in shaping the lives of area residents. Too often, however, these assets have been ignored, taken for granted, or carelessly wasted and destroyed. In spite of this, recent social and economic changes have brought about an increased awareness and appreciation of these natural blessings. More and more, attention is being paid to efforts to protect, preserve and enhance these precious resources. To date, most local action has been on behalf of the private sector, for county government has taken little action to sustain the benefits received from the resources. While state and federal regulations do help, without complimentary local controls specifically crafted to fit the needs of Oconee County, the resources that area residents deem to be invaluable will continue to be unnecessarily threatened.

The protection of both the quantity and quality of the area's water is a vital issue for Oconee County's future success. First, as the available water supply is allotted to additional users, particularly the large municipalities surrounding our region, the amount available for use in Oconee County will shrink, limiting not only Oconee's ability to attract and manage new development, but also to maintain the lifestyle that the county is known for. To avoid this, Oconee must work to insure that any future division of the resource allows for our own future needs. Also, even if sufficient supplies are guaranteed, the county must work to protect the quality of its waters, for poor agricultural and forestry practices, residential and commercial runoff, and a number of other sources of pollution continue to threaten the resource. Of course, we cannot do this alone, for much of Oconee County's water is shared with other jurisdictions possessing legitimate claims to an allotment; therefore, future plans will likely require at least some compromise to succeed.

It should not be forgotten that, in spite of the many benefits Oconee County receives from its natural assets, some potential dangers do exist. The most obvious of these include tornados, floods, and earthquakes, all of which have struck Oconee County in the past, and will likely revisit the area in the future. Yet, though these threats may be initially devastating, the physical damage they bring is typically short-lived, for proper planning and training, combined with improvements in technology, have greatly lessened the overall impact of such natural disasters. Other recently recognized threats, however, have not been yet been satisfactorily addressed. Radon, for example, has received little attention on the local level. Although some studies have indicated that Oconee County's geology favors the production of the carcinogen, the exact level of the threat has not been established. As a result, few residents have chosen to install protective measures against the invisible menace. As more information becomes available on the topic, however, Oconee County leaders may have to consider implementing more stringent codes to protect county residents.

Also of recent concern is ground-level ozone, a dangerous pollutant that causes a number of breathing-related ailments. The problem occurs when two types of chemicals, volatile organic compounds and nitrogen oxides, are exposed to warm temperatures. As

such, the United States Environmental Protection Agency (EPA) has established standards limiting these emissions under the Clean Air Act. Currently, Oconee County has been declared to be in attainment of this standard, but we need to remember that this may change in the future; for, not only will the level of our own growth potentially raise emission levels, but also the continued development of other regions. The fact is that political borders do not affect air pollution, so pollutants emitted in one region of the country are often carried long distances in the atmosphere, impacting air quality far from the source. That is generally seen to be the case in our area, for recent computer modeling has shown that much of Oconee County's ozone originates elsewhere. Therefore, only a coordinated, regional approach offers hope for a real solution. To this end, Oconee County has become a partner in the South Carolina Early Action Compact to reduce ozone-causing emissions. As a partner in this effort, Oconee County has been allowed to create its own plan of action in concert with other South Carolina counties. Because this is an ongoing effort with obligations extending at least into the next decade, county leaders need to remain cognizant that, if current efforts fail to achieve the needed reductions, additional actions may be necessary to avoid potentially burdensome federal and state mandates.

Another problematic issue related to Oconee County's natural resources involves development in steep terrain. Given proper engineering and best management practices, most projects in steep areas can be done safely. As these items are often expensive, however, safeguards are sometimes ignored, resulting in the loss of valuable topsoil and vegetation, sedimentation of streams and lakes, and increased downstream flooding. Additionally, the steep areas of Oconee County typically have thinner soils, a condition which makes the installation and proper operation of septic tanks more complicated. Yet, in some areas, public sewer service will likely not be available for decades- if ever- meaning that septic tanks are going to be a fact of life in Oconee County for a long time into the future. Currently, regulation of such problems in Oconee County primarily falls on states authorities. As development increases, however, county leaders will be forced to weigh the Oconee County's options for increasing protections of our natural resources on the local level.

Agriculture has traditionally played a large role in the economy of Oconee County, and continues to be seen as an invaluable part of the area's lifestyle. In recent years, however, rapid development has led to the loss of many acres of the prime farmlands. While some such change is to be expected as the number of agricultural operations shrinks, unmanaged growth will likely result in an ever-increasing conflict between our remaining farmers and new residential development. The fact is, an increase in population density in farming areas increases the opportunity for incompatible land usage, for normal agricultural operations often result in smells, noise and dust that many people find offensive. Although it is not known if the solution will be found in working with individual communities to designate agricultural areas, or some other type of land use regulation, it is likely that unless local leaders take action, Oconee County will likely lose a cherished institution. Natural resources are valuable to all Oconee citizens. Wise stewardship will be required in not only our generation but also in the generations that follow us. Conservation practices and policies will need to be look at often to ensure the best results. Conservation policies work best when all of the various stakeholders are present in the critiquing and establishing of the policies that protect our resources. Oconee County has a chance to take a leading role in protecting water quantity and quality by developing its own water plan and using this plan as a step toward developing a complete guide to conserving Oconee's natural resources. The goals established by the Comprehensive Plan when acted upon will help preserve what we have been given for years to come.

### Natural Resource Objectives for the Future

- (1) Preserve, protect and enhance the quality and quantity of Oconee County's groundwater and surface water.
- (2) Preserve, protect and enhance Oconee County's environmentally sensitive lands, unique scenic views, agrarian landscapes, and topographic features.
- (3) Manage natural assets in a manner that ensures the resources continue to enhance Oconee County's lifestyle and provide increased economic opportunities.
- (4) Continue to ensure reasonable access to and use of Oconee County's natural amenities for both residents and visitors.
- (5) Work to expand the utilization of accepted best management practices in all agricultural and forestry activity in Oconee County.
- (6) Complete and properly maintain Oconee County's Geographic Information System (GIS).
- (7) Evaluate and address the threat of radon across Oconee County as necessary.
- (8) Evaluate the need for the county to begin a program to control storm water runoff and sediment.
- (9) Explore and evaluate the need for a program of development fees. This would involve the paying of upfront fees by developers to offset the impact of the new development on schools and infrastructure.

(10) Continue as an active partner in the South Carolina Early Action Ozone Reduction Compact, adopting and maintaining ozone-causing emission reductions strategies as necessary.



# **Cultural Resources Element**

## Introduction

This element considers those resources that serve to develop the intellectual, moral, and physical lives of Oconee residents. Among the items considered are the area's unique past, historic buildings and structures, unique natural and scenic resources, and other activities that improve the mind and body, such as recreation, music and the arts. These resources will be noted and described as objectively as possible in order to both promote an awareness of various cultural assets and to encourage protection and utilization of forgotten and endangered resources.

# A brief overview of the origin of Oconee County

Note: The following overview highlights some of the key events in the origin of Oconee County. It is in no way to be taken as a comprehensive history of the region. Therefore, a number of events and people having an arguably significant impact on the county's history are not included in these paragraphs, for to attempt a comprehensive history of the region is beyond the scope of this document.

There are various accounts of the derivation of the name "Oconee". It is generally agreed, however, that the word was adopted from the Cherokee Indians, the Native American tribe occupying the area at the time European explorers first visited the region. Early records show the name was associated with a village, located near present-day Tamassee, variously spelled in colonial records as "Wocunny", "Wacunny", "Ukwunu", and "Acconee". Early maps of the area also show the European settlers used the name to denote a range of hills called "Woccunny Mountain". The spelling of the word, over time, was standardized to "Oconee". Regardless of its derivation, however, the word was associated with the region long before the 1868 birth of Oconee County.

The land now comprising Oconee County had been visited and inhabited for centuries when the first Europeans arrived. While there is nothing to indicate the exact time that humans first saw the region, there is evidence that wandering bands of hunters roamed over much of South Carolina in search of animals as early as between 8,000 B.C. to 12,000 B.C. At some point during the ensuing centuries, as people began to live a more agrarian lifestyle, the Oconee area became home to native peoples attracted by an abundant water supply, plentiful game, and fertile soils. Among the first known Europeans to explore upper South Carolina was the Spanish explorer, Hernando DeSoto, who passed through the region in the 1530's. Though he did not travel through the area comprising modern Oconee County, he did make contact with some members of the Cherokee nation, the Native American tribe occupying the Oconee region at the time. Just how long the Cherokees had been in the area, however, is a matter of debate, for some believe that the Cherokees were relatively recent arrivals, having driven out another people only within the previous century or so- yet others claim they had occupied their Southern Appalachian home for many generations. In either case, it is known that the Oconee area was occupied for centuries prior to the arrival of the Europeans, a fact testified to by countless arrowheads, stone axes, pottery shards, and other artifacts found throughout the county.

Although the French and Spanish had attempted to settle in South Carolina earlier, the English first established a permanent settlement in Charles Town (Charleston). Because the English venture to colonize the region was a commercial venture, trade with the native population was crucial. Soon, the English were venturing far into the upcountry to deal with various tribes, including the Cherokee in the Oconee area.

At the time the English arrived in South Carolina, the Cherokees living closest to the newcomers were part of what was known later as "Lower Town" Cherokees, those living in villages scattered across the eastern side of the southern Appalachian Mountains. The principal town during the early history of contact with the English was located in Tugalo Town. This village, which lay on the Tugalo River, was located on the present border between Oconee County and Stephens County, Georgia, and was the focus of many early trading and military missions from Charleston. A war between the Cherokees and the Creek Nation, however, eventually destroyed the village, and another village, Keowee Town, became the site of the principal town. This village, located on the western side of the Keowee River in modern Oconee County, served as the principal town of the Lower Town Cherokees until they were driven from the area in the late 1700's. The site of Keowee Town is today under the waters of Lake Keowee.

By the time of the Revolutionary War, the Native American population in what is now Oconee County had suffered greatly from both disease and war. As the ever-increasing European population moved closer to the suffering Cherokee population, depredations, initiated by both sides, led to a number of conflicts. And though peace would eventually return, treaties proved to be, at best, only temporary arrangements, soon violated by one side or the other. Finally, in 1776, a year marked by open conflict between the Cherokees and the Carolinians, Colonel Andrew Williamson led a large force of militia into the Oconee area, destroying all of the Cherokee villages that they could find. Among the leaders of the Williamson Campaign was future war hero and Oconee area resident Andrew Pickens, who, during one of the battles near present-day Tamassee, led a small group of militia in driving off a much larger Cherokee force near Tamassee in what has become known as the "Ring Fight". In the end, only names remained to denote the presence of the area's native population; among these, Esseneca (Seneca), Tamassee, Jocassee, Tugalo, Chehohee (Cheohee), Toxaway, and Oconee.

In 1785, the Cherokees ceded most of their South Carolina lands in the Treaty of Hopewell, signed near what is today the Oconee-Pickens border, on the Seneca River plantation of Andrew Pickens. The newly ceded lands, which were designated part of the Ninety-Six District of South Carolina, soon attracted large numbers of white settlers. Some parcels of land were awarded by a land grant to Revolutionary War veterans and their widows, while other lands were offered in lieu of payment for services in the conflict. Among the first group of settlers in the area was Revolutionary War hero Colonel Benjamin Cleveland, who settled near the confluence of the Tugalo and Chauga Rivers. A border disagreement between the new states of South Carolina and Georgia, however, threatened to disrupt settlement of the new lands. South Carolina, which claimed a vast amount of land running all the way to the Mississippi River, filed suit before Congress against its southern neighbor, who claimed lands west of the Seneca River for its own. In 1787, a convention was held in the city of Beaufort, South Carolina, to negotiate a treaty settling the issue. The Treaty of Beaufort, signed by representatives from South Carolina and Georgia, established the northwestern South Carolina border along the most western course of the Tugalo River, permanently delineating the southern and western boundaries of the region that is Oconee County.

The early settlers of the Oconee area included both recent immigrants and those whose families had lived for generations in other parts of America. Among those moving into the area in the 1780's and 90's, the majority traced their lineages to the British Isles, which included, of course, England, Ireland, Scotland, and Wales. Other Europeans, including Germans, Swiss, and French were also represented among the settlers. In addition, some white settlers brought African slaves into the area. It should be noted, however, that the number of slaves in the region never approached that of the Lowcountry.

Over time, as the population of the region grew, the Oconee area underwent several governmental reorganizations. In 1789, for example, the region was designated as part of the newly created Pendleton County of the Ninety-Six District. In 1791, Pendleton County was annexed into the new Washington District. The courthouse and seat of government for the Washington District was located at Pickensville, which lay in the current-day town of Easley, in Pickens County (the town of Pickensville was destroyed by fire in 1817). In 1798, Pendleton County became the Pendleton District, with the courthouse and seat of government at the town of Pendleton, which had been established in 1790.

In the late 1820's, the area was reorganized once again, and the Pendleton District was divided into Pickens and Anderson Counties. The area comprising modern Oconee County was designated as the Western District of Pickens County, with the modern Pickens area comprising the Eastern District. To serve the governmental needs of Pickens County, a courthouse was constructed on the west bank of the Keowee River. The courthouse soon attracted businesses, churches, and other institutions to the area, and a town, naturally named Pickens Courthouse (today called "Old Pickens"), was established. Pickens Courthouse served the county for the next 40 years, growing at one time, according to some sources, to a population of approximately 1800 inhabitants, a relatively large community of the era.

During the mid-1800's, two new groups of people entered the Oconee area. In 1849, the German Colonization Society of Charleston purchased the land for what is now the town of Walhalla from Col. Joseph Grisham, one of the region's leading citizens (and father-in-law of Georgia's Civil War Era Governor, Joseph E. Brown). Soon thereafter, a growing community of German immigrants was established at the base of the Blue Ridge Mountains. At about the same time, in 1852, the South Carolina Legislature chartered the Blue Ridge Railroad with the purpose of constructing a railroad through the Blue Ridge Mountains. With plans to reach Knoxville, Tennessee, the project, if completed, would have directly connected the region to the Tennessee Valley and beyond, greatly impacting the Oconee area's future.

The railroad project required the construction of several tunnels in the hills above the new town of Walhalla. This brought in a large number of workers, predominantly Irish immigrants, who established the town of Tunnel Hill. In spite of initial progress, however, the mountains were not breached when, in the period immediately preceding the Civil War, work on the project ceased. Without work for its residents, Tunnel Hill was abandoned, with most of the Irish leaving the area. Although some later efforts were made to revive the project, the railway through the mountains was never completed, leaving today's Stumphouse Tunnel as a public reminder of what could have been a major change in direction for Oconee County's history.

During the Civil War, hundreds of men from both the Eastern and Western Districts of Pickens County left their homes to fight. Like so many other areas of the South, many of the soldiers never returned, with wounds or disease claiming a heavy toll. The Oconee area, however, having no major industry or transportation artery to attract the attention of the Union army, escaped the devastation of battle that was visited on so many other areas of the South. Escaping the direct physical destruction of the conflict, however, did not mean that the region shirked its share of the load, for many area residents returned home with physical and emotional scars that remained with them for the rest of their lives.

In 1868, just three years after the end of the Civil War, the region underwent its final governmental reorganization, with the Eastern and Western Districts of Pickens County being separated along the established district lines into new counties. While the Eastern District maintained the name honoring Revolutionary War hero Andrew Pickens, the Western District was named Oconee, with its seat of government and courthouse being established in the town of Walhalla. The town of Pickens Courthouse, no longer a center of political and economic activity, gradually withered away and was abandoned. Today, only the Old Pickens Presbyterian Church, standing surrounded by dozens of graves on a tree-covered hillside above the Keowee River, remains to denote the existence of the once-thriving community.

In the years following the Civil War, Oconee County's agrarian economy was, as in much of the rest of the South, tied to one or two cash crops. In Oconee, these crops were cotton, the king of southern crops, and timber. Unlike many other areas, however, Oconee

was blessed with assets not available to all. A railroad, the Airline Railroad, was built through Oconee County in the 1870's, leading to the establishment of the towns of Seneca and Westminster. By the turn of the century, the availability of rail transport, combined with an abundant water supply, access to raw materials, and a plentiful supply of labor began to attract the attention of the textile industry. Soon, Oconee County was home to a number of textile operations, providing jobs for thousands of area residents and dominating the area's economy until the latter part of the twentieth century.

The twentieth century saw many changes in Oconee County, with an economy based largely on agriculture and textiles evolving into one focused on high-tech industry, service businesses, nature-based recreation, and tourism. Development spurred on by the creation of the county's major lakes and energy projects permanently altered the county's landscape. Also, a dramatic increase in population occurred during the last several decades of the era, with thousands of people from other regions moving to the region. Farmland located throughout the county, sometimes belonging to the same family for close to two centuries, suddenly became the site of residential and commercial developments. New businesses cropped up along the sides of the county's main transportation arteries, creating commercial corridors that likely will someday link the majority of the county's municipalities into a single urban area. And, of course, with these changes came new attitudes, values, and lifestyles that influenced all aspects of life in the county. By the end of the twentieth century, the formerly rural, agrarian county that many in South Carolina have so often called the "wild west" was no longer so wild, having joined other fast developing, increasingly urbanized areas of the state; yet retaining many of the assets that have made it special for so many centuries.

### **Areas of Historical Significance**

Many sites of historical significance have survived from the early years of European settlement in the Oconee area. While some of these sites are special because they reflect the unique character and attitudes of those peoples that established them, all are irreplaceable historic treasures that have become an invaluable part of Oconee County's heritage.

There are currently twenty sites on the National Register of Historical Places in Oconee County:

(Figure CR-1 shows the approximate location of each listing.)

#### • Ellicott Rock

Ellicott's Rock Wilderness Area, located in northern Oconee County, was designated in 1975 as South Carolina's first wilderness area. Included within the boundaries of the 9,012-acre area is Ellicott's Rock, which was delineated in 1811 by surveyor Andrew Ellicott as the point where the boundaries of North

Carolina, South Carolina and Georgia join.



#### • Alexander-Hill House

Located at High Falls County Park, about 10 miles north of Seneca, off Highway 183.



#### • Keil Farm

Located at 178 Keil Farm Road, Walhalla, this site is privately owned property.



Located on Academy Road, in the Long Creek Community. Established in 1914 as a school for underprivileged children in the mountainous regions of Oconee.

• Long Creek Academy

#### • Newry Historic District

Located off Highway 130, north of Seneca, Newry retains the architectural elements of a southern textile mill village of a bygone era. Established in 1893, this self-contained community was constructed to house workers of the then Courtney Manufacturing Company.





#### • Oconee County Cage

This iron-caged wagon was used as a jail in the early years of the county's history. Currently, the cage is designated to be part of the Oconee County Heritage Museum's displays.

#### • Oconee Station and William Richards House

Located at 500 Oconee Station Road, north of Walhalla, Oconee Station was built in 1792 as one in a series of blockhouse forts established to protect the growing



post on the site until his death in 1809.

population of the area, and was used as an outpost for troops until 1799. The structure, which also served as an Indian trading post, lies adjacent to the William Richards House, which was built in 1805, and is believed to be the first brick building in northwest South Carolina. William Richards ran a prosperous Indian trading

#### • Old Pickens Presbyterian Church

Located off Highway 183 near the Pickens County line, the Old Pickens Presbyterian Church is the only structure still standing from what was once the

town of Pickens Courthouse, the county seat of Pickens County before the Western District of the county was designated as Oconee County in 1868. Lying near the Oconee Nuclear Station at the base of the Lake Keowee Dam, the church stands as a reminder of a once



progressive and thriving town along the Keowee River. The church was chosen as the site for relocated graves moved from the valleys near the Keowee River before the impoundment of Lake Keowee. The churchyard is now the final resting place of dozens of early settlers, including Revolutionary War veterans John Craig and John Grisham (Grissom), prominent landowners, and ancestors of some of the leading citizens of the region.

#### • Ram Cat Alley and Seneca Historic District

Located in downtown Seneca, Ram Cat Alley lies at the heart of the original town, and retains turn-of-the-century architecture. The Seneca Historic District, roughly bounded by South First, South Third, and Poplar Streets, contains a wide variety of houses and churches dating from 1876 to 1926. Seneca, which was established when the Airline Railroad (now Norfolk Southern Railroad) was completed in 1873, grew to be Oconee County's largest commercial center by the 1930's. As a result of the growth and development, many differing architectural styles were utilized. This variety is represented by such structures as the Seneca Baptist Church and Seneca Presbyterian Church, which exhibit brick facades and neo-classical design; while many houses in the area feature bungalow-style architecture, with the majority of their rooms situated on the ground floor fronted by a large porch.

#### Southern Railway Passenger Station

Located at the Westminster Depot, 129 Main St., Westminster. According to tradition, the Westminster Depot was built ca. 1885. The railroad was one of the principle reason for the growth and development of the town of Westminster (incorporated in 1875), and as a result, the railroad station is one of the town's oldest buildings and has long been considered a local landmark. The station served as a gathering place and as a center of activity for this small community.



#### • St. John's Lutheran Church

Located at 301 W. Main St., Walhalla, this structure was constructed in 1853. With its bell tower and bright red door, St. John's serves as one of the main landmarks in the town of Walhalla. While necessary modernization and upgrades have occurred, the church retains much of its original architecture, including its pews, pulpit, and stained glass windows. The church is also notable for having the highest steeple of any church in the area. The cemetery is home to many Confederate and Revolutionary War soldiers.

#### • Stumphouse Tunnel Complex

Located approximately 5 miles west of Walhalla on Highway 28, Stumphouse Mountain Tunnel, which is currently managed by the Town of Walhalla, gets its name from a 1600-foot railroad tunnel begun as a result of an 1852 South

Carolina Legislature charter to the Blue Ridge Railroad Company to build a connection between Charleston, South Carolina and Knoxville, Tennessee. The railroad was designed to connect existing tracks in Anderson, South Carolina, and Knoxville,



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Tennessee, via the Blue Ridge Mountains. One of the major obstacles to this was Stumphouse Mountain, which required the construction of a tunnel through 5,863 feet of solid granite. By late 1858, track had been laid as far west as Pendleton, and plans were in the works to complete the track on to Walhalla. Due to the impending Civil War, however, construction on the tunnel ceased. After some poorly managed attempts to restart the project in the years following the war, the tunnel was abandoned. Besides being a locally well-known tourist attraction, the tunnel lays claim to being the location of the first successful site in the South for making blue mold cheese.

• Walhalla Graded School

Located at 101 E North Broad St., Walhalla.



#### • McPhail Angus Farm Located off of Pine Grove Road, this site is privately owned property.

#### Oconee State Park

Located near Mountain Rest in the Blue Ridge foothills, this 1,200 acre park serves as the southern trailhead for the Foothills Trail, an 80 mile wilderness hike on the Blue Ridge Escarpment. The park was developed by the Civilian Conservation Corps (CCC) through a New Deal program created by President Franklin D. Roosevelt. The CCC program was designed to create jobs during the Great Depression and helped develop many of the parks across the country. Several of the buildings located in the park were built by the CCC during the 1930's and are still in use.



#### Russell House

This site served as a late nineteenth and early twentieth century stage stop and inn for travelers between Walhalla and Highlands, N.C. The farmstead included 10 agricultural outbuildings, including a log barn, spring house, outhouse, garage, corn crib, and potato cellar, and a main house which served as the inn. The site





was listed on the National Register on February 29, 1988 but the main house, two storage buildings, and a privy were destroyed by fire on May 14, 1988.

#### • Faith Cabin Library

The Faith Cabin Library at Seneca Junior College is significant for its role in African American education and social history in South Carolina between 1937 and 1939. This building, constructed in 1937 and known as the Oberlin Unit because it was largely the result of the interest and efforts of students at Oberlin College in Ohio, is important on a local level for its impact on the African American community in Oconee County, and on the state level as one of only two remaining free-standing Faith Cabin Libraries extant of the thirty built in South Carolina between 1932 and 1943.



#### Retreat Rosenwald School

The Retreat Rosenwald School, built in 1924, is significant for its association with African American public education during the first half of the twentieth century and as an extant example of an architectural design typically associated with the schools funded in part by Julius Rosenwald. The Julius Rosenwald Fund sought to improve schools for African Americans in the rural South. In addition to their architectural significance, extant Rosenwald Schools reflect the struggle of black communities to give their children better educational opportunities. Rosenwald schools also reflect the strong bonds of community: the public space became an important social center for rural blacks.

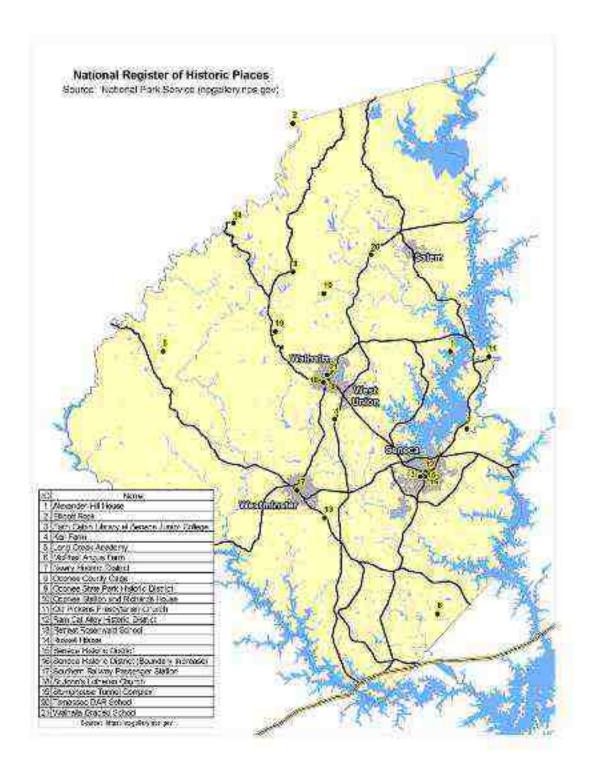


#### • The Tamassee DAR School

The Tamassee DAR School is significant at the state level for its association with the history of education in the rural northwestern corner of South Carolina and as a unique example of a school in South Carolina sponsored by a national patriotic organization for the purpose of helping poor children in a rural area have better access to education. The school is one of only two in the United States created by the Daughters of the American Revolution (DAR). Funding for the School was provided primarily by state chapters of the DAR from all across the country.



#### Figure CR-1



Source: Oconee County GIS Department

# Other Oconee County Locations of Cultural and Historical Significance

Though not formally designated as a location of significance, many locations throughout Oconee County are notable for cultural, historical or architectural attributes. These include:

- Fort Madison Village: Located near Walton's Ford and the site of the Tugalo Town Village of the Cherokees, modern Fort Madison is situated on the banks of the Tugalo River, and emerged following the completion of the Airline Railroad in 1873.
- Ramey's Mill: A waterpowered gristmill located on Cobb's Bridge Road, west of Westminster. The mill is currently inoperable.



- Horseshoe Robinson House: Privately owned, the home of Revolutionary War hero 'Horseshoe' Robinson is located a few miles from Westminster on Horseshoe Bridge Road.
- Pleasant Grove (Block) Church and School: This church and school, located at the intersection of Dr. Johns Road and Blackjack Road, near Westminster, takes its name from the "blockhouse" fort that served the congregation in its early history. Though the original blockhouse is long gone, the existing structures, particularly the adjacent one-room schoolhouse, are excellent examples of turn-of-the-century design.



- Retreat Presbyterian Church: Established about 1851, the church is located on South Retreat Road, near Westminster. This wooden structure contains original brickwork and stained glass windows.
- Center Church: One of the earliest churches in the area, Center Church is located on Highway 24 between the Oakway and Tokeena communities.





• Westminster's Abby/Retreat Streets area is home to many structures exhibiting 19<sup>th</sup> Century architecture, including the Westminster Presbyterian Church, and the Ballenger, Grubbs, and McCormick houses. The town, incorporated in 1875, is the westernmost municipality in Oconee County.

### **Natural Resources**

Dozens of scenic views can be found throughout Oconee County, many of which may be enjoyed from one of several Scenic Highways. The Cherokee Foothills Scenic Highway (Hwy. 11); the Savannah River Scenic Highway (Hwy. 24), part of the South Carolina Heritage Corridor; and National Scenic Highway 107 all serve as main routes through the county.

Oconee County hosts part of the South Carolina National Heritage Corridor, which extends 320 miles across South Carolina from the mountains of Oconee to the port of Charleston. The Heritage Corridor offers a cross-section of the state's history, culture, and natural landscapes by showcasing the evolution of regional life, from plantations and farms to mill villages and urban centers. A large portion of Oconee County's forested land lies within the boundaries of the Andrew Pickens Ranger District of the Sumter National Forest. This 85,000-acre district encompasses mountains, waterfalls, and a multitude of other scenic features.

The Chattooga River is one of a handful of free-flowing streams of its size found in the Southeast. The survival of the Chattooga's dense forest and undeveloped shorelines are due in large part to its May 10, 1974, congressional designation as a Wild and Scenic River. The designation, reserved for rivers possessing not only spectacular scenery, but also recreation, wildlife, geologic, and cultural



values, restricts all motorized vehicles and development within a corridor of about <sup>1</sup>/<sub>4</sub>-mile on either side of the river. The stream itself is regarded as a whitewater paddler's paradise, with spectacular mountain scenery and elevation changes averaging 49.3 feet per mile. Beginning in the Appalachian Mountains and concluding at Lake Tugaloo, the Chattooga River is widely recognized as one of the premier rivers in the nation.

The Chauga River Wild and Scenic Area is comprised of 3,274 acres of rugged terrain and beautiful scenery. With approximately 10 miles of the river flowing through public lands, many opportunities exist for a wide variety of recreational uses. The Chauga, a tributary of the Tugaloo River that generally flows parallel to the larger Chattooga River, enters the backwaters of Lake Hartwell west of Westminster.

The Jocassee Gorges, a 33,000-acre wilderness area, was created by a South Carolina Department of Natural Resources (DNR) purchase of pristine mountain land around Lake Jocassee, which lies in northern Oconee County. The result of collaboration between public agencies and private organizations, the DNR purchase of the Gorges preserved the region's unique ecological systems by permanently protecting the lands from development. This protected area harbors a great diversity of plant and animal species, including the rare Oconee Bell flower, a significant Black Bear population, and Peregrine Falcons. The area, part of approximately 30,000 square miles of protected wilderness lands in the Southern Appalachians, is available for some limited recreational usage, such as hiking, fishing, camping, and hunting. The Foothills Trail, one of the upcountry's most popular natural attractions, also winds through the area.



Lake Jocassee, a 7,500-acre reservoir of cold, clear water lying primarily in northern Oconee County, was formed when the Duke Power Company dammed the Toxaway and Horse Pasture Rivers in 1973. The 385-foot dam not only provides water for

hydroelectric power generation, but also creates an exceptionally scenic reservoir that provides visitors with a number of outdoor recreational opportunities, such as swimming, water skiing, sailing, scuba diving and fishing. Several waterfalls are also accessible from the lake, including the Laurel Fork, Lower Whitewater, and Thompson River Falls.

Lake Keowee, sister lake of Jocassee, was the first of the Duke Power Company lakes developed as part of the Keowee-Toxaway complex, and serves both the Oconee Nuclear Station and the Keowee hydroelectric station. Lake Keowee's 300-mile shoreline sports a wide variety of fish, including white, smallmouth and largemouth bass, black crappie, bluegill and threadfin shad. Lake Keowee is also renowned for its exclusive lake communities, with large numbers of new residents from other regions, many retirees, having made the shores of the lake their home.

Lake Hartwell's 56,000 acres were created by the U.S. Army Corps of Engineers between 1955 and 1963 and serves as part of the Georgia-South Carolina border on the Savannah, Tugaloo and Seneca Rivers. The Corps maintains over 20 recreation areas on the lake's 962-mile shoreline, with many featuring launching ramps, comfort stations, picnic areas and shelters, swimming beaches, and playgrounds. Lake Hartwell is consistently ranked as one of the most popular Corps lakes in the nation.

### Waterfalls

Oconee County's abundant water supply, combined with the areas's hilly topography, results in a large number of streams that drastically change elevation over a short distance. Rapids and waterfalls, therefore, are quite common throughout the county. In fact, Oconee County possesses approximately 1/3 of the named waterfalls found in upstate South Carolina. These include:

\*Issaqueena Falls

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\*Brasstown Falls

\*Opossum Creek Falls

\*Long Creek Falls

\*Fall Creek Falls

\*Riley Moore Falls

\*Blue Hole Falls

\*The Chauga Narrows

\*Yellow Branch Falls

\*Station Cove Falls

\*King Creek Falls

\*Lee Falls

\*Licklog & Pigpen Falls

\*Big Bend Falls

\*Miuka Falls

\*King Creek Falls

\*Spoonauger Falls

\*Bee Cove Falls

\*Lower Whitewater Falls



#### Parks



#### **County Parks:**

Oconee County manages three parks: High Falls County Park, South Cove County Park, and Chau Ram County Park. The oldest of these, High Falls, which is located on the shores of Lake Keowee near Highway 183, was established in 1972 and takes its name from a waterfall on the Little River (now an arm of the lake). Included within the park's 60 acres are a number of attractions, including 100 campsites; facilities for tennis, volleyball, and carpet golf; a swimming area; and picnic tables. In addition, High Falls is also the site of the historic Alexander Cannon-Hill House (circa 1814), which originally stood on the banks of the Keowee River, but was relocated to the park upon completion of the lake.

South Cove County Park, which opened in 1974, is located on Lake Keowee near Seneca. The park possesses a wide range of recreational opportunities, including 88 campsites, facilities for tennis, volleyball, and carpet golf; and picnic areas and a swimming beach. In addition, there is an easily accessible boat launch with plentiful parking and a fishing pier. South Cove is often utilized for hosting festivals, fishing tournaments, and other public events.

Chau Ram County Park, located at the confluence of the Chauga River and Ramsey Creek, opened in 1974 and Located at the confluence of the Chauga River and Ramsay Creek, Chau Ram Park is Oconee County's "Best Kept Secrets". With a 40 foot waterfall and Oconee's longest suspension bridge, Chau Ram has something to offer for everyone. Visitors can enjoy hiking and biking trails or go tubing and fishing on the river. Many of our campers use the park as a base when going rafting on the nearby Chattooga River. Attractions include 28 camping sites with 30 amp power and water, bathhouse, 4 shelters, 1 recreational building, hiking trails, waterfall



#### State Parks:

Oconee County is the only county in the state to have four state parks. These include Devils Fork State Park, Lake

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Hartwell State Park, Oconee State Park, and Oconee Station State Park.

Devils Fork State Park, named for a nearby stream, was created in 1990, making it one of the newest parks in the system. The 622-acre park lies on the shores of Lake Jocassee, and boasts a number of waterfalls located throughout its area. Like most state parks, it offers camping, fishing, swimming, and other traditional outdoor recreational opportunities. In addition, Devil's Fork offers a number of rental villas, as well as offering scuba diving facilities for those individuals desiring to explore the exceptionally clear waters of Lake Jocassee. Devil's Fork is special for many reasons, but perhaps the greatest reason is the fact that 95% of the world's population of Oconee Bells, a very rare, delicate wildflower, exists within the park's boundaries.

Lake Hartwell State Park, located near I-85 on Scenic Highway 11, contains 680 acres stretching along 14 miles of Lake Hartwell's shoreline. With 148 campsites and 2 boat ramps, this park is very popular with 56,000-acre Lake Hartwell's anglers. In addition, the park offers opportunities for picnicking, hiking, and swimming.

Oconee State Park, built by the Civilian Conservation Corps in the 1930's, draws users from a wide area. Located near the Wild and Scenic Chattooga River, the park's 150 campsites often serve as a base camp for whitewater enthusiasts. In addition, the park is connected to the Foothills Trail, one of the major hiking trails in the Southeast. For those with a less-adventurous nature, the park offers a museum, archery range, carpet golf, playground, cabins, and two private lakes for swimming, fishing, and paddling rental boats. Oconee State Park has consistently proven to be one of the premier state parks in the system.

Oconee Station State Park is located in northern Oconee County on the grounds of the Oconee Station, a frontier blockhouse constructed in the 1790's, and the Richards House, one of the oldest brick structures in the area. This relatively isolated park is ideal for those individuals wishing to get away from some of the more crowded public facilities and enjoy a more natural setting. With its 1.5-mile nature trail (one way) and fishing pond, this park is an excellent picnic spot that can be enjoyed by the whole family.

#### **Municipal Parks:**

In addition to county and state parks located in Oconee County, the various municipalities operate a number of city parks and recreation areas. These include, among others, Seneca's Shaver Recreation Complex, Walhalla's Sertoma Recreation Field, and Westminster's Hall Street Ball Fields.

## **Cultural Facilities**

Although Oconee County remains a largely rural area, it possesses a number of cultural resources that serve to both educate and enrich the lives of its residents. These include:

• Lunney Museum- Located at 211 W. South First St. in Seneca, the museum is an early 1900's style bungalow that displays Victorian furniture, period costumes, and other items of Oconee memorabilia.



- England's General Merchandise Museum- Located at 103 W. Main St. in Westminster, this former retail store contains over 2,000 items from a bygone era, including antique toys, clothes, glassware, medical equipment, photos and other items unique to the area.
- Blue Ridge Art Center- Located at 111 E. South 2<sup>nd</sup> St. in Seneca, The art center is maintained by the Blue Ridge Arts Council, a volunteer-run, 501(c)(3) non-profit organization. We are a membership-based organization offering shows, events, education and promotional opportunities to our members a diverse group of artists from all walks of life and skill levels.
- Duke Power's World of Energy- Located near Seneca at 7812 Rochester Hwy on the banks of Lake Keowee, the World of Energy is a hands-on, self-guided facility that illustrates how electricity is generated using water, coal and uranium. The facility is also a popular venue for meetings and public activities.
- Oconee Cultural Heritage Center- Located in downtown Walhalla near the Oconee County Courthouse, this recent addition to the county's cultural landscape is a historical museum focused on presenting the story of the lives of all groups of people that helped to shape Oconee County.

### Libraries

The Oconee County Public Library system currently operates four libraries in the county. These include the main branch in Walhalla, and satellite branches in Salem, Seneca and Westminster. The system also provides a bookmobile service to outlying rural areas.

# Churches

As in many areas of the South, the Judeo-Christian tradition has always played a large role in the lives of the residents of Oconee County. This continues to be true today, with approximately 200 churches of various denominations located in the county. While the vast majority is Protestant, a growing number of individuals, particularly among those individuals relocating to Oconee County from other regions, adhere to other beliefs.

# Festivals

Oconee County celebrates its rich culture and history in a number of festivals each year. These include:

- **Oktoberfest-** Held each autumn in Walhalla, the Octoberfest celebrates the town's German heritage with traditional food, music, and recreation.
- **The South Carolina Apple Festival-** Established in 1961, the Apple Festival celebrates the beginning of apple season in Oconee County, the largest apple producing area in the state. Beginning on Labor Day, and continuing through the following weekend, this Westminster festival celebrates the importance of the apple crop to Oconee County's agricultural economy.
- The Spring Heritage Festival- Held annually in Seneca in and around historic Ram Cat Alley, this festival's events include the Miss Oconee and Palmetto Princess pageants.
- Native American Day Festival- This annual festival, held at Oconee Station State Park, celebrates the strong ties the area has to its Native American past.
- **Mountain Rest Hillbilly Day-** This Independence Day event has been held in the Mountain Rest community for many years, focusing on traditional mountain music, food, and fun.

# Arts & Humanities

The Oconee County School District supports a countywide arts education program, which was awarded the Elizabeth O'Neil Verner Award for Excellence in Arts Education in 1993. In addition to the public school system, a number of other agencies and organizations promote art appreciation and education throughout the county. These include:

• The Oconee County Arts & Historical Commission- A county supported, non-profit agency that funds numerous cultural and art events throughout the year.

• The Oconee Community Theatre- Located at 8001 Utica St. in Seneca, the theatre showcases local actors in several productions each year.

• The Blue Ridge Art Council- The council works to expand understanding, awareness and participation in the arts in Oconee County.

• The Oconee County Historical Society- The Historical Society is an organization involved in ongoing research about Oconee and neighboring counties.

### Analysis

Life in modern Oconee County is unique. The influence of the area's inhabitants' wideranging beliefs and traditions, combined with an abundance of natural resources, has created a lifestyle not found in many other regions.

The Oconee County area has played many roles over the centuries: a home to various native peoples, a key link in the economic health of colonial Carolina, a battleground in the Cherokee Wars, a frontier settlement area for a young South Carolina, home to a number of regional and national leaders, and a player in the textile industry. Today, Oconee is increasingly a region of natural resource-based recreation, retirement communities, and high-tech industry. These changes have all left their marks, combining to create what is undoubtedly a unique cultural tradition.

Evidence of the area's cultural wealth can be found in the variety of Oconee's listings on the National Register of Historic Places. The differing types and styles of buildings, a tunnel complex, a prison wagon, and a rock marking the intersection of three states testify to a diversity not found in many other places. It must be recognized, however, that many historical and cultural landmarks have been lost forever in recent decades. Prather's Covered Bridge on the Tugalo River was lost to arson, as was the Russell House on the Highlands Highway, and dozens of farmsteads now under the area's lakes are treasures that can never be reclaimed.

A large number of people moving into the county from other regions is increasing Oconee's cultural diversity. Of these new residents, perhaps the most obvious group is composed of immigrants from Mexico and Central America, who bring with them ideas and traditions formerly unknown in the area. These differences, often compounded by a language barrier, sometimes lead the newcomers to be seen negatively by established residents. This negative attitude increases the possibility that the newcomers, denied acceptance by a significant portion of the county's population, will become isolated on the margins of the social

structure. As a result, it is possible that a very talented people with a tremendously rich cultural heritage will be excluded from taking a full part in life in Oconee County, thereby negating many of the potential benefits that might otherwise be enjoyed by all.

Although Oconee is blessed with a large number of natural and man-made resources of cultural and historical value, the area has traditionally been under-marketed. While widely recognized for its rivers and mountains by outdoor enthusiasts, other groups are less informed about the many resources available within the county. The result is that many resources are oftentimes ignored.

One valuable resource that has not received its due attention in past years is the county's scenic highways. The Cherokee Foothills Scenic Highway, in particular, is in need of better management policies to maintain its scenic designation.

Oconee finds itself in a unique position. With upstate South Carolina currently undergoing steady and above average growth, the cultural and natural resources that Oconee possesses provides the county with the potential to be marketed as a historical and natural resources paradise. Proper protection and management of these resources, combined with a professional approach to spreading the word, should allow Oconee to set itself apart from the rest of the region as a magnet for new industry, residential development, and additional investment. If this is to become a reality, however, it must be a priority to discover and document all aspects of Oconee County's historical and cultural treasures in order that these valuable assets may be protected and utilized in the best manner possible.

As Oconee's resources are brought to the attention of a wider audience, it should be understood that many of Oconee County's cultural resources require special attention to avoid damage from some of the very changes being sought. Increased development and growth within the county, for example, may threaten areas of value as historical or natural resources. As a result, many treasures may be encroached upon and have some of their attributes diminished due to unwise or poorly planned development. Any efforts at marketing the county's resources need to be carefully managed to ensure that the resources are well protected, thereby improving life for all residents, and not just benefiting investors.

Some specific areas of concern include, as previously stated, Oconee County's scenic highways, which, if appropriate management policies are not enacted to preserve their natural beauty, may possibly be in danger of losing their official designation. Other areas as well, such as the county and state parks, and the areas near the Sumter National Forest, need increasing attention to manage properly the pressures of growth. Such areas play a pivotal role for the county by not only providing recreation for Oconee's residents and visitors but also provide an economic boost for the county. Finally, if the county's population continues to grow as is predicted, then the county's parks system will need to be upgraded and expanded, with the development of new parks becoming necessary.

Overall, Oconee County has a tremendous potential to utilize its existing cultural and historical resources to enhance the area's industrial recruitment and residential development. If not properly managed, however, these cultural treasures may be negatively impacted by the efforts. In addition, a decision must be made regarding what cultural treasures are too valuable to lose to forces of neglect and time. Progressive action, not reaction, should drive the preservation of our cultural heritage. In doing so, the unique culture of Oconee County will be insured far into the future.

### **Cultural Objectives for the Future**

The following objectives are intended to address those needs and desires established within the Cultural Resources Element. See the 'Goals' section of this plan for specific strategies and timelines for implementation.

1. Continue support of a comprehensive planning process so as to insure that the citizens of Oconee County possess accurate inventories and analyses of existing county conditions, and the opportunity to better manage anticipated future conditions.

2. Create and/or update plans for specific priorities.

3. Complete and properly maintain Oconee County's Geographic Information System (GIS).

4. Encourage development in a way that protects and preserves our natural resources.

5. Manage development in a manner that ensures our natural resources and lifestyle enhance sustainable economic growth and job opportunities.

6. Promote a countywide arts program to facilitate an appreciation for the arts and other cultural facilities found within Oconee.

7. Conserve and protect features of significant local, regional and national interest, such as scenic highways, state parks, and historic sites and expand efforts to promote them for tourism.



# **Community Facilities Element**

## Overview

This element focuses on the activities and entities that are essential to maintaining Oconee County's health, safety, growth and quality lifestyle. These include government facilities and infrastructure, fire protection, health and emergency medical services, education, and libraries and cultural facilities. This element will also include statements of goals and policy recommendations based on the expressed wishes of the citizens of Oconee County.

Since 2004, Oconee County has continued in her rapid population growth and development. Continued growth has resulted in increased demands on community facilities throughout the County. Governmental facilities have been expanded to provide much needed space for the Department on Health and Social Services for example. Continued renovations and maintenance of existing facilities has continued to be a part of the ongoing work of the County. Several changes have occurred in the area of Emergency Management and Fire Service throughout the County, which will serve the County well in the years to come. As Oconee County looks toward the future, she must continue to look for opportunities which will improve the overall government facilities and infrastructure, fire protection, health and emergency medical services, education, libraries, and cultural facilities.

## Form of Government

Oconee County is governed under the Council-Administrator form of government. Oconee County Council, which is composed of five members elected by voters in respective districts, acts as the county's legislative body. The Council's responsibilities include establishing policies, setting taxation levels, and guiding the county's growth within the limits of state and federal law. To execute adopted policies, directives and legislative actions, the Council employs an Administrator, the county's chief administrative officer. The Administrator's duties include directing and coordinating activities of county agencies, preparation of budgets, supervision of expenditures, enforcement of personnel policies, and the responsibility for employment and discharge of personnel. (Home Rule Handbook for County Government [2013-2016 Supplement], South Carolina Association of Counties).

## **Governmental Facilities**

Table CF-1 lists governmental facilities owned or maintained by Oconee County.

Governmental Office Facilities Owned or Maintained by Oconee County						
Facility	Location	Usage				
Oconee County Court House	Walhalla	Courts, Offices				
Pine Street Administrative Complex	Walhalla	Administrative Offices				
Oconee County Economic Development	Walhalla	Office				
Agricultural Building	Walhalla	Offices				
Department of Social Services Building	Walhalla	Offices				
Oconee County Health Department	Walhalla	Health and Environmental Offices, Clinic				
The Rock Building	Walhalla	Offices				
Westminster Magistrate's Office (County Maintained)	Westminster	Court, Office				
Seneca Magistrate's Office (County Maintained)	Seneca	Court, Office				
Public Works Facilities	Seneca	Road and Bridges				
Solid Waste Facility	Seneca	Waste Management				
Vehicle Maintenance Facility	Seneca	Vehicle Service and Repair				
Brown Square	Walhalla	Office Space or Storage				
DSS Building (previously Next Day Apparel)	Walhalla	Social Services				

Source: Oconee County Planning Department

As Table CF-1 shows, most of Oconee County's governmental office facilities are county owned, with only the magistrate's offices in Westminster and Seneca leased. While the majority of all governmental offices in Oconee County have traditionally been located in the town of Walhalla, the county seat, until the late 1990's they were scattered in various buildings near the courthouse. In 1999, however, most governmental offices were relocated to the Pine Street Administrative Complex. As a result, the citizens of Oconee County are able to conduct most governmental business in one location. Soon after relocation of the county governmental offices, the Oconee County School District began planning to construct their new administrative facility across the street from the Pine Street Complex, further centralizing governmental offices.

Since 2004, Oconee County has continued to improve the location and efficiency of government offices. Several departments have relocated to more efficient locations and buildings. The County's Road and Bridges Department, Solid Waste, and the Vehicle Maintenance Facilities are now all located on Wells Highway in the Seneca area. The

County also acquired and renovated the former Next Day Apparel building on Kenneth Street in Walhalla. The project was completed for less than three million dollars and increased the available space for the Department of Social Services by 39,000 square feet! Ms. Elaine Bailey, the director of South Carolina Department of Social Services

In the summer of 2001, ground was broken to construct a new courthouse facility in Walhalla. Situated adjacent to the existing structure, the new facility offers much needed space for both judicial and administrative operations. Also, the new structure, planned in a different era than the old courthouse, reflects the requirements of dealing with the potential dangers of life in the 21<sup>st</sup> Century. As a result, the new structure will include both well-designed passive protective measures and state-of-the-art security systems.

The new Courthouse was completed in 2003 but today issues regarding the construction are still being resolved. The Justice Department has cited the facility for not complying with the American with Disabilities Act. Efforts to correct this problem are currently underway and the improvements made to the facility will benefit all citizens.

Great changes have come with the expansion and modernization of governmental facilities. Among the most notable has been the greater reliance on computers and other associated information technology. To coordinate and facilitate this upgrade, an Information Technology Department was created in 2000. Under the direction of this department, county government is using state of the art technology to become more efficient and accessible to the citizens of Oconee through improved existing facilities, as well as newly created ones. Chief among these new tools is the Internet, which allows the public not only to access information 24 hours a day, but increasingly to conduct necessary business without leaving their homes. In addition, the county's geographical information system (GIS), begun soon after the move to Pine Street, will provide both county government and the public with information about Oconee that was never before available, allowing for better planning and operation in all aspects of county life.

Municipal government facilities are not included in Table CF-1. These are typically located within the jurisdictional limits of the various municipalities.

## Libraries

Oconee County boasts a modern library system that has, since 1948, grown to include not only the main library in Walhalla, but also branches in Seneca, Westminster and Salem. The main library in Walhalla, open seven days a week, served 228,615 visitors during 2008. Of those, 32,941 are registered card holders who checked out 293,999 books, CDs,

DVDs, magazines, and books-on-tape. A total of 44,556 people signed in to use the 36 public internet computer terminals at the library during 2008. It was a recent recipient of a National Endowment for the Humanities *Picturing America* grant. The Oconee County Friends of the Library was organized in 1986 to provide services in the areas of financial and volunteer support to supplement the libraries' resources and to stimulate community awareness, use, and involvement with the libraries.

Oconee's libraries utilize an internet-based catalog system, enabling them to take advantage of the latest information technology. Users of the library system can log in to

the library websites to search, view, and request library materials online. Computers are now available to the public for access to the Internet. Establishing wireless internet access for the public is currently underway and will be available in the near future.



The system also operates a bookmobile service to offer materials to residents in rural areas of the county. Along with the bookmobile service, the library offers a summer reading program for youth and adults alike. The program includes creative reading activities designed for specific age groups, as well as events such as Family Movie Night for the whole family at the main library. In

addition to its regular holdings, the library system maintains a collection of area maps dating from the early 1700's, microfilm copies of local newspapers and census records, and genealogical and historical materials from the county. The main library is also a depository for public records related to the Oconee Nuclear Station.

The Oconee County Library Board has been working to update the library facilities in Seneca for a number of years. The Oconee County School District has volunteered to donate land adjacent to the newly build Blue Ridge Elementary School in Seneca. Under the proposal several new staff would need to be added to adequately serve the new

library. The Library Plan has also stressed the need for an additional County library in the Fair Play area and they are continuing to work to make that facility a reality.

Other area libraries include the Cooper Library at Clemson University, which houses over 1.5 million books, periodicals and microforms; and the Tri-County Technical College Library, which contains over 35,000 volumes.

## **Public Safety**

The Emergency Management Agency was created in 1980 by the Oconee County Council to insure the complete and efficient utilization of all county facilities to combat disaster from enemy attack or natural disaster. Then in 2007, County Council consolidated the various agencies and created the Emergency Services Protection Department to coordinate Emergency Management, Rescue, Fire and Hazmat. The mission of Emergency Management is to protect the people and resources in the County by minimizing damage, injury, and loss of life that results from any type of disaster, provide for the continuity of government, and provide damage assessment in the event of emergencies.

## **Fire Protection**

There are currently seventeen fire districts in Oconee County, with the county providing equipment for fire protection in the unincorporated areas of the districts. Table CF-2 shows the fire stations located in Oconee County, the type of service offered, and the fire insurance classification issued by the Insurance Service Office (ISO Rating) for areas within the various districts.

	Oconee County Fire Stations							
Station	Location (See Map CF-1)	Type of Service						
Number		(Volunteer or Full-	ISO Rating (Ap	oril, 2002)				
		Time)						
			5 miles road travel	All other				
			from station					
1	Oakway	Volunteer	7	9				
2	Salem	Volunteer	7	9				
3	Corinth-Shiloh	Volunteer	7	9				
4	Mt. Rest	Volunteer	7	9				
5	Walhalla	Full-Time	4	9				

<b>Table Cl</b>
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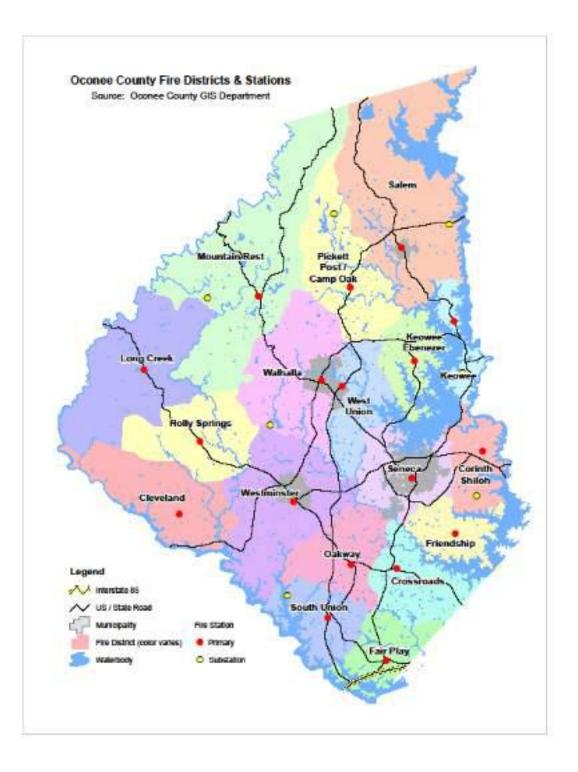
6	Westminster	Full-Time	5	9
7	Seneca	Full-Time	3	9
8	Fair Play	Volunteer	9	6
9	Long Creek	Volunteer	9	9
10	Cleveland	Volunteer	9	9
11	Keowee-Ebenezer	Volunteer	7	9
12	Friendship	Volunteer	5	9
13	Cross Roads	Volunteer	8	9
14	Pickett Post-Camp Oak	Volunteer	7	9
15	South Union	Volunteer	7	9
16	West Union	Volunteer	5	9
17	Keowee Key	Full Time	4	4
21	Bountyland	Full Time	4	4
22	Salem	Volunteer	4	4
23	Foxwood Hill	Volunteer	4	4
24	Holly Springs	Volunteer	4	4
25	Whetstone	Volunteer	4	4
26	Village Creek	Volunteer	4	4
27	Shiloh	Volunteer	4	4

Source: Oconee County Fire Marshal's Office

Table CF-2 shows that there are five full-time fire departments in Oconee County, with the personnel paid for by the various municipalities or, in the case of Keowee Key, by fees collected from property owners. The county established county wide Emergency Service Response in June 2007. Station #21 is a paid county station that responds back-up to all volunteer stations on structure fires. A relative measure of the success of the fire protection system is shown in the ISO ratings, which vary from 4 to 9, with the lowest found in Seneca, and the highest found in the rural areas farthest from hydrants and a fire station. The ratings, which are periodically updated, are used as factors in determining the cost of fire insurance for homeowners residing in the districts.

Map CF-1 illustrates the approximate location of each fire station. The numbers shown on the map correspond to the individual station number.

Updated(2017) Map CF-1Source: Oconee County Planning Department



### Law Enforcement

The unincorporated areas of Oconee County are under the protection of the Oconee County Sheriff's Department. The Sheriff, who serves as an elected official, manages a staff of deputies and administrative personnel headquartered at the Oconee County Law Enforcement Center on South Church Street, in Walhalla. Although the majority of deputies are focused on patrol duties, a number of different specialties exist within the department. Among these are investigators, narcotics officers, courthouse security, family court officer, civil processors, community services, and beginning in 2001, traffic enforcement.

Oconee County municipalities, with the exception of Salem, maintain their own police departments to provide law enforcement within their jurisdictions. The Oconee County Sheriff's Department serves the town of Salem. Currently the Sheriff's Department is working on establishing a quick link on it's website to show criminal activity in Oconee County and Municipalities.

Table CF-3 provides a breakdown of Oconee County crime statistics for selected years.

Reported Crime in Oconee County								
Agency	Year	Murder	Rape	Robbery	Aggravated Assault	Breaking & Entering	Larceny	Motor Vehicle Theft
	2001	0	12	7	191	278	572	78
Oconee	2002	4	22	13	211	344	700	102
Sheriff's	2005	1	24	7	209	483	877	114
Office	2006	3	24	10	216	321	729	83
	2007		27	16	253	388	752	105
	2001	1	3	7	43	64	494	22
Seneca	2002	0	3	6	55	57	381	21
Police	2005	0	5	14	<b>79</b>	96	416	34
Tonce	2006	0	6	13	77	118	325	27
	2007	0	4	8	59	<u>69</u>	444	<b>29</b>
	2001	0	1	0	69	18	97	14
Walhalla Police	2002	1	0	0	30	22	72	3
	2005	0	2	3	22	21	<b>98</b>	9
	2006	0	1	2	14	30	77	5
	2007	0	2	7	23	<b>26</b>	103	4

Table CF-3

	2001	0	0	0	23	9	22	3
	2001	0	0	0	29	39	124	7
Westminster	2002	0	0	0	12	12	57	3
Police	2006	0	3	3	8	9	41	1
	2007	0	0	9	18	25	67	3
	2001	0	0	0	0	1	2	0
	2002	0	0	0	2	4	0	0
West Union	2002	0	0	0	0	0	3	1
Police	2006	0	0	0	0	1	3	0
	2007	0	0	0	0	0	0	0
	2001	*	*	*	*	*	*	*
	2002	*	*	*	*	*	*	*
Salem	2002	0	0	0	1	0	2	0
Police	2006	0	0	0	0	0	0	0
	2007	0	0	0	0	0	0	0
			-	-	d Crime by A	-		
						Breaking		Motor
Agency	Year	Murder	Rape	Robbery	Aggravated	&	Larceny	Vehicle
rigency	I Cai I	Withdef	Rupe	Robbery	Assault	Entering	Larceny	Theft
	2001	1	16	14	326	370	1187	117
Oconee	2002	5	25	19	327	466	1277	133
County	2005	1	31	24	323	612	1453	114
Totals	2006	3	31	28	315	479	1174	83
	2007	0	33	40	353	508	1367	141
	2001	6	35	46	306	631	1896	190
Pickens	2002	1	37	34	301	760	1943	253
County	2005	2	36	26	324	955	2789	316
Totals	2006	6	36	33	280	772	2401	307
	2007	1	45	46	343	886	2671	326
	2001	15	71	172	857	1917	4970	520
Anderson	2002	14	80	163	960	1810	5235	732
County	2005	16	72	157	839	1912	5843	805
Totals	2006	18	91	162	890	1860	5426	767
	2007	5	63	140	<b>97</b> 1	2585	5855	895
<b>a</b>	2001	35	150	575	2193	3402	11236	1152
Greenville	2002	30	197	576	2261	3470	10652	1232
County	2005	30	187	635	2427	4131	11484	1629
Totals	2006	26	147	633	2368	4525	11008	1733
L		_	-					

	2007	30	151	761	2357	4529	11617	1822
Source: South Carolin	a State Lav	v Enforcement	Division		*no da	ata available		

The tables above show that Oconee County is blessed with a great police force that is keeping the number of crimes in the County to a minimum. As one would expect the rural nature of the County also contributes to the relatively low number of crimes. Criminal activity tends to increase as one move's from a rural setting to a more urbanized setting. As urbanization continues to increase in the county the effects on the law enforcement will need further study. Questions such as: what is the optimal ratio of officers to population, what additional funding will be needed to maintain and then improve services, how much space is needed, is there a need for an additional command center in the county, and are ways to achieve our goals by using tools like intergovernmental agreements?

One of the major issues facing law enforcement throughout the county is jail space. Currently the Oconee County jail does not have enough beds to house the number of inmates residing there. An upgrade to the County jail has been proposed which will ensure the space available to inmates is sufficient to meet state housing requirements. An inmate housing analysis should be conducted to establish the most cost effective method of keeping inmates in a safe and secure environment. Alternative programs for those awaiting trial and have not been found guilty of non-violent crimes should be analyzed. Once convicted, the State of South Carolina has developed a number of alternative housing options which works to reserve precious jail space for those criminals who truly need it.

One of the programs the State of South Carolina utilizes is called the *Shock Incarceration Program.* This program was established to provide an alternative to traditional incarceration. Young offenders ranging in age between seventeen (17) and twenty-nine (29) years old are eligible for the program. Designed to build discipline, work ethic, strenuous physical activity, and education among other things this program provides the necessary tools for the offender to learn self-discipline, gain a positive attitude, and learn good values and behavior. Programs such have to potential to be adapted in certain circumstance with the inmate population in Oconee County. However, the majority of inmates in the County system are either awaiting trial or under family court penalties.

#### **Emergency Medical**

Emergency medical service in Oconee County is provided in conjunction with the Greenville Hospital System whose ambulance fleet and paramedics are available 24

hours per day. In addition, mutual aid is provided to Anderson and Pickens Counties in South Carolina, and Rabun and Stephens Counties in Georgia.

"Basic Life Support" medical first response units are dispersed throughout Oconee County to provide support to the primary emergency medical service. These units are located in the following communities:

- o Corinth Shiloh
- o Friendship
- o Mountain Rest
- o Oakway
- o Salem
- o Seneca
- o Walhalla
- o Westminster

Additional, all fire departments within Oconee County have CPR/AED equipment and trained personnel to assist with medical response when needed. Unique rescue operations are conducted by two teams within Oconee County – Oconee Special Rescue Team & Oconee County Dive Team. These teams are comprised of individuals, that through training, have acquired specialized skills to handle calls such as High-Angle Rescue, Wilderness Search, Confined Space, Dive Rescue and Swift-water Rescue.

Oconee County provides vehicles, equipment, training and supplies for the "Basic Life Support" units and Special Response teams which are staffed by approximately 150 volunteers and career staff. In 2016, Units from Oconee County Emergency Services responded to 3,411 medical responses.

## Health Services

The cornerstone of Oconee County's healthcare system is the recently renovated 155-bed patient tower and new hospice house at the Oconee Medical Center, located near Seneca. The hospital has ten centers of service, which include the Outpatient Infusion Center,

Clemson Health Center, Women's Services, Surgical Services, Rehabilitation Services, Emergency Services, Pain Management, Diagnostic Services, the Lila Doyle Long Term Care Facility, and Inpatient Services. In addition, the hospital is involved in several community



Community Facilities Page 12 of 26

outreach programs that include Oconee Kids Health, NurseFirst Family Health Center, Occupational Health, OMH HomeCare Network, and Medication Access. (2003-2004 Oconee County Profile, Appalachian Council of Governments) Oconee County is also home to a wide variety of other healthcare related operations, including various residential and nursing care facilities, a dialysis clinic, a blood donation facility, a sports medicine practice, and a number of other medical specialists. The Division of Health Licensing of the South Carolina Department of Health & Environmental Control licenses a number of health facilities located across Oconee County. Table  $CE_{-4}$  provides information about these facilities.

Table CF-4	provides information	about
Table CF-	4	

Health Facilities in Oconee County							
Facility	Type of Care	Operator	Number of Beds/Stations/Participants				
Oconee Adult Day Care Center	Adult Day Care	Anderson- Oconee Council on Aging	50				
Blue Ridge Surgery Center	Ambulatory Surgery	Blue Ridge/Clemson Orthopaedic Assn, LLC	4				
Oconee Community Residence I	Intermediate Care for Mentally Retarded	S.C. Dept. of Disabilities and Special Needs	8				
Oconee Community Residence 2	Intermediate Care for Mentally Retarded	S. C. Dept. of Disabilities and Special Needs	8				
GHS Home Health	Home Health	GHS	3				
GHS Hospice of the Foothills Cottingham House	Hospice	GHS	15				
GHS Hospice of the Foothills	Hospice	GHS	3				
Oconee Memorial Hospital	Hospital	GHS	169				
Lila Doyle Nursing Care Facility	Nursing Care	GHS	120				
	Nursing Care	SSC Seneca	132				

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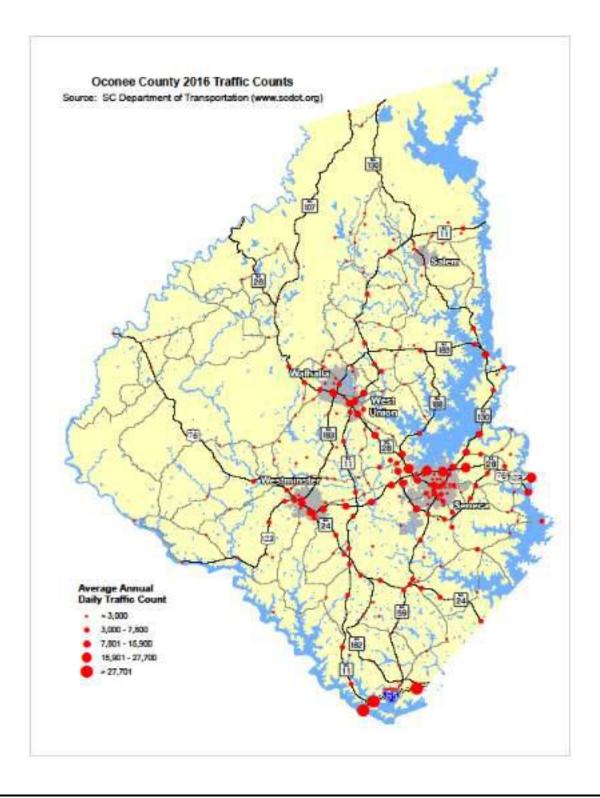
Seneca Health & Rehabilitation Center		Operating Co., LLC	
Oconee Dialysis Clinic	Renal Dialysis	Bio-Medical Applications of South Carolina, Inc.	14
Foothills Assisted Living	Alzheimers Care	Cite Health Mgmt. Services, Inc.	76
For A Season Assisted Living	Residential Care	James Arnold Stevens, Inc.	5
The Inn at Seneca	Alzheimers Care	ALC TISSC, LLC	50
Lakeview Assisted Living	Alzheimers Care	Lakeview Assisted Living, Inc.	19
Morningside of Seneca	Residential Care	Morningside of Seneca, L.P.	59
Seneca Residential Care Center Care		Wilburn Hammers	33

Source: SC DHEC Division of Health Licensing

### Infrastructure Roads

Over 2,000 miles of roads run through Oconee County. Included in this total are approximately 220 miles of state primary roads, and over 600 miles of state secondary roads. In addition, slightly over 4 miles of Interstate 85 cross the southern tip of the county. Of the remaining 1, 200 or so miles of Oconee roads, about half are owned by the county, and half are private. Approximately 1/3 of the county roads are unpaved. (South Carolina Office of Research and Statistics; Oconee County Community Facilities Plan 1997). Map CF-5 lists the Oconee County locations having the heaviest traffic volume.

Map CF-5



#### Airport

Another key transportation resource in Oconee County is the Oconee Regional Airport, a county owned and operated facility located east of Seneca, lying just across Lake Hartwell from Clemson University. The airport, which has undergone a great many upgrades and expansions over the last decade, is utilized by a number of area businesses and recreation interests. Not only is the



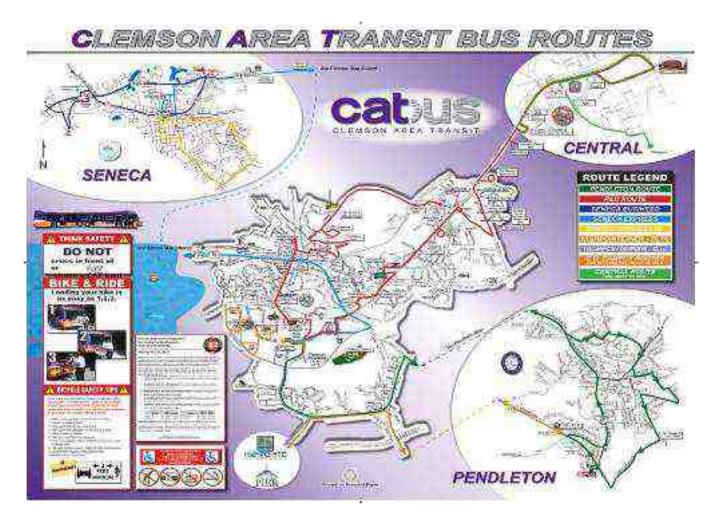
facility popular with a growing number of Clemson University football fans that prefer to fly in for home games, but it also provides a convenient <del>a</del> way for corporate executives to easily visit their facilities in the Oconee area. In-2011, 75 aircraft, ranging from corporate turbine planes to personal single engine planes, were based at the airport. The airport has 40 T-hangars for indoor storage, a private 15,000 square foot corporate hangar, and 40 outdoor tie-down spaces for aircraft. In the realm of airport data the airport's 5000' long runway has precision GPS, non-precision GPS, NDB instrument approaches, and is home for 75-based aircraft. It also hosts the Clemson University Flight Dept. and the Clemson University Flying Club and The Flying Tigers Skydiving Club. As of fiscal year 2017 there are 4 full-time employees and 1 part time employee.

#### Railways

Oconee County is served by the Norfolk Southern Railway system, which provides freight service to a number of area industries. Entering the county from the east near Clemson, the railroad travels through Seneca and Westminster, and on to Toccoa, Georgia. In addition, passenger service is available in nearby Clemson.

#### **Public Transit**

Oconee County residents have free transportation from Seneca in the west, to Anderson in the east via Clemson Area Transportation (CAT).



### Water Treatment

There are five major public water providers located in Oconee County, which in 1997 supplied more than 10 million gallons of water per day. The overall capacity exceeds 14 million gallons, with recent upgrades in some systems greatly increasing the volume. The major providers include:

<u>Salem Water Department</u> Owner: Town of Salem Primary Source: Wells Service Area: City limits, with expansion along Highway 130

Seneca Light and Water Owner: City of Seneca Primary Source: Lake Keowee

Service Area: City limits and adjacent areas extending approximately 10 miles north and south

#### Walhalla Water Department

Owner: City of Walhalla Primary Source: Coneross Creek Service Area: City limits, Town of West Union, and adjacent areas

#### Westminster Commission of Public Works

Owner: Town of Westminster and private investors Primary Source: Chauga River Service Area: City limits and adjacent areas

#### Pioneer Water System

Owner: Customers within system Primary Source: Purchased water from Seneca and Westminster water systems Service Area: Southern Oconee County extending into western Anderson County

In addition to the major providers listed above, a number of private suppliers offer service to residents living in developments across Oconee County. (Oconee County Community Facilities Plan 1997)

### Sewage Treatment

Public sewage treatment is provided by the Oconee County Sewer Commission, which operates a treatment facility that primarily serves the municipal wastewater collection systems of Seneca, Walhalla, and Westminster. These individual systems combine to create a service area focused on the "triangle" region between the cities. In addition, lines have been constructed to serve the US 76/123 corridor east of Seneca, establishing southeastern Oconee County as one of the most attractive areas for development in the region. Future plans include the establishment of sewer service to Oconee County's I-85 corridor, an effort anticipated to dramatically expand the area's ability to attract new businesses.

The existing sewer treatment facility is located at 623 Return Church Road, south of Seneca on the banks of Coneross Creek. The facility treated approximately 869 million gallons of wastewater and processed 3179 tons of dewatered sludge in 2016. In the late

1990's, the facility's capacity was expanded from its original 4 5 million gallons per day (MGD) to 7.8 (MGD). As of August 2017, the facility has allocated 4.378 MGD to residential, commercial, and industrial users in Oconee County, which is 56 percent of the facility's total design flow.

As well as the public sewer system, several private providers offer service to some of the larger residential developments in the county. Among these are Chickasaw Point and Foxwood Hills on Lake Hartwell, and Keowee Key on Lake Keowee. (Oconee County Community Facilities Plan 1997) In 2000, the village of Newry, previously served by a failed private system, was connected to the public sewer system in a joint effort by Oconee County and the City of Seneca.

### Solid Waste

The Oconee County Solid Waste Department is located on Wells' Highway, near Seneca, SC. As Oconee County does not operate a countywide solid waste collection program, it provides residents with eleven manned and two unmanned (1 City of Westminster, 1 City of Walhalla) convenience centers located across the county. Currently, all of the county's solid waste is hauled to landfill facilities in Homer, Georgia. The county does, however, maintain a Construction and Demolition (C&D) Landfill near Seneca.

## Education

### **Elementary and Secondary Education**

Oconee County is home to 16 public educational facilities. The majority of the elementary and secondary facilities are public schools, which are owned and operated by the School District of Oconee County. Table CF-6 lists the public schools in Oconee County.

### Table CF-6

Oconee County Public Schools						
School	Location					
James M. Brown Elementary	Walhalla					
Blue Ridge Elementary	Seneca					
Fair Oak Elementary	Westminster					
Keowee Elementary	Seneca					

Northside Elementary	Seneca
Orchard Park Elementary	Westminster
Ravenel Elementary	Seneca
Tamassee Elementary	Tamassee
Walhalla Elementary	Walhalla
Westminster Elementary	Westminster
West-Oak Middle School	Westminster
Seneca Middle School	Seneca
Walhalla Middle School	Walhalla
Seneca High School	Seneca
Walhalla High School	Walhalla
West-Oak High School	Westminster

Source: Oconee County School District

In addition to the traditional schools listed in Table CF-6, the Oconee County School District operates an adult education program, an alternative school program, and the Hamilton Career Center, all located in Seneca.

The School District of Oconee County currently operates seventeen elementary, middle, and high schools under the direction of the Superintendent of Education. The Superintendent, the school district's chief administrative officer, is hired by the Oconee County School Board, a body comprised of 5 members representing Oconee's voting districts. The district's total student enrollment in 2008 was 10,716. (SC Annual School District Report Card Summary, SC Department of Education)

Table CF-7 provides an overview of Oconee County student's results of the 2016 Scholastic Aptitude Test.

#### Table CF-7

School	Total	Number	Composite	
Year	Number	Taking SAT	Scores	
	of			
	Seniors			
2007	604	254	1040	
2016	707	155	1112	

Source: South Carolina Department of Education and http://www.ed.sc.gov/topics/assessment/scores

AC	CT Resul	ts for Schoo					
School	Total	Number	Composite	Verbal	Math	Reading	Science
Year	Number	Taking	Scores	Average	Average	Average	Average
	of	ACT		Score	Score	Score	Score

	Seniors						
2016	707	674	18.2	564	18.3	18.3	18.5

The Education Foundation is a non-profit organization that operates as a collaborative effort between local civic groups, community boards, and city and county departments to enhance the teaching of science, technology, engineering, arts, mathematics, and service learning (STEAMS). The Foundation has awarded over \$95,000 during the past two years for this purpose. (Superintendent's Report, <u>SC Annual School District Report Card Summary, SC Department of Education</u>) (By 2010 this had happened)

District-wide implementation of the John Collins' Writing Program is now complete, providing structure and focus to this extremely important communication skill. The program also stresses strategies that improve reading and critical thinking skills. The district has also made improvements in foreign language instruction. During the 2016-17 school years, the district added a second Chinese teacher; two elementary schools were able to provide Spanish programs, and one piloted Rosetta Stone software giving students the option of learning French, German, Spanish, Mandarin Chinese, or Japanese. Beginning in fall 2017-18, all ten elementary schools will have access to Rosetta Stone, making Oconee one of the first in the nation to implement this district-wide.

The district consistently provides STEM trainings and experiences to teachers to better provide quality instruction for students. District grants have been obtained to provide 3-D technology to classes to assist instruction of abstract concepts. The Duke Energy Foundation also provided grants to support district STEM initiatives through intensive professional development.

While schools teach STEM topics to students almost daily, many elementary schools have also given parents the opportunity to learn more. Several schools hosted STEM nights this year with large numbers in attendance. These activities give students a chance to demonstrate what they are learning as well as keep parents informed about school activities and career options for their children.

In addition to public schools, several private schools are located in Oconee County. Among these are the Oconee Christian Academy, the Faith Center Academy, and the Tamassee DAR School. Other private institutions, typically church supported, may also be found in and near the county. Also, the Clemson Montessori School, in nearby Clemson, is an option for some Oconeeans. The Wilderness Camp School in Westminster, as well as the Wilderness Way Girls Camp School in Fair Play, offers alternative educational options for at risk teens.

#### **Higher Education**

Although there are no colleges or universities located within the county, a number of institutions of higher learning are within easy commuting distance for Oconee residents. Included among these is Clemson University, one of the leading land grant universities in the nation. Also nearby is Anderson University and Southern Wesleyan University, both private Christian-oriented schools; and Tri-County Technical College, part of South Carolina's world-class technical education system that offers students industrial, business, technological and university transfer programs. In addition, a number of private institutions offer various business and trade programs for Oconee residents.

## Analysis

On the whole, Oconee County is served by modern, relatively efficient community facilities. In fact, compared to those living in other areas of similar size and population, Oconee's residents are fortunate in many ways. The challenge facing the county, however, is not to simply maintain what exists now, but to provide for the expansions and upgrades that will be necessary in the coming years. Most sources indicate that the population of Oconee County will continue to grow rapidly in the foreseeable future; and given the proximity of both metropolitan Atlanta and Greenville, there is little doubt that it will. For citizens to maintain control of how their community develops, therefore, it will require planning years in advance- if the county is not adequately prepared to manage future challenges, it will be run over by them. The area's community facilities, which play a major role in establishing and maintaining the county's lifestyle, are therefore of vital interest.

Maintaining a system of good roads will be a major issue for Oconee County. As the area's population grows, existing roads will naturally become more crowded, entailing either the improvement of current routes, as well as the construction of new ones. However, as much of Oconee County's appeal is directly tied to its natural assets, planning and developing new thoroughfares in a manner that least impacts these resources is vital. Issues such as the negative effects of impervious surfaces on groundwater, and the impact of additional roads in sensitive areas must be closely looked at to avoid negating the benefits of adding new roads. Also, a viable system of regular road maintenance should be adopted and adhered to if waste is to be avoided.

Oconee County's water supply is an item of vital interest to all area residents. Currently, a handful of public water suppliers provide the more developed areas of the county with

water, with a number of smaller private suppliers offering service to individual communities. There is, however, no overall plan for developing water service across the county, leaving many areas without access to a public water system. In years of normal rainfall, most residents in such areas are able to fill their needs from private wells. But during periods of drought, such as Oconee County experienced during the past decade, groundwater levels can become dangerously low. Further compounding the problem is the number of wells that now experience the inflow of pollutants during dry weather, forcing even some of those with sufficient volume to seek an alternative supply of safe drinking water. Also, there is another reason the lack of planning for future water needs impacts Oconee County residents, for, as never before, water supplies are tied directly to economic prosperity. With water a vital component for many high-tech industries, the lack of a comprehensive plan for supplying water to prime industrial areas leaves Oconee County without a major tool to use in attracting new jobs. Therefore, to meet both the physical and economic needs of the county, it is vital to establish a planning process that provides for the expansion of water supplies into any area requiring it.

The lack of sufficient sewer capacity is a serious impediment to any community's economic development, and Oconee County is no exception. Currently, Oconee County has a single sewer treatment facility that primarily serves the municipalities. As the county becomes more urbanized and developed, however, limitations placed on the facility will act as a bottleneck to growing the county's economy, eventually threatening the area's quality of life. A solution must be found that allows for an expansion of sewer service to all developing areas of the county. This could come in the form of upgrading the present facility, or the construction of new facilities. While the existing facility has the potential to significantly expand operations, various factors, such as the volume of flow in Coneross Creek, threaten to limit the utilization of the capacity. And, even if such problems are overcome, using the existing plant may not be the most efficient answer for servicing distant areas of the county, such as the I-85 corridor in southern Oconee County. In any event, such efforts will require a new countywide focus by those directing the planning for sewer operations.

Oconee County's solid waste situation remains tenuous at best, with the question of how to handle the area's future solid waste an issue of much debate. A long-range plan that delineates the way in which the county will handle its solid waste over the next several decades is greatly needed. Whether by a joint effort with other jurisdictions to create a regional landfill, or the establishment of a new facility within the county, or simply to reach a long-term agreement with a facility in another area, a decision on the handling of solid waste in the future is critical if the county is to be able to move onto other issues. In addition, efforts to decrease the volume of waste produced, such as promoting an increase

in recycling, should be considered. One possible solution may be the establishment of a "pay as you throw" program, which has been used effectively by other jurisdictions to more fairly charge system users for the amount of solid waste they generate. Finally, as expansion and upgrading the system of recycling centers will likely be an ongoing effort for the foreseeable future, new facilities should be planned strictly on the basis of population growth and development.

Oconee County is fortunate to have access to a number of quality educational institutions. The School District of Oconee County has created a system of public education that consistently ranks well in the state, sending a significant number of graduates on to higher education. And, although there are no colleges located within the county, Oconee is surrounded by a number of schools of higher education, providing area residents with easy access to a wide variety of educational choices. To insure that Oconee County's residents have the best opportunities possible, therefore, the county should look to establishing closer bonds with these institutions, utilizing all available talent, and carefully considering the impact of future county actions on the overall quality of education. Closely connected to this is the direction taken by the county library system. Currently, improvements and upgrades planned for the system should provide Oconee County with excellent facilities that can easily meet the needs of county residents. As with so many other items considered in this element, however, the focus needs to be on continued planning for the growth expected in the county's future. Areas that in the past were thinly populated farming communities, for example, are undergoing rapid growth that will require more services than simply providing a bookmobile stop. Planning for such growth is crucial if these new needs are to be properly met.

Oconee County is undergoing changes never before experienced. As the population grows, areas of the county that were formerly fields and pastures are fast becoming residential developments, shifting the population distribution from the traditionally "built up" areas into other places, and necessitating the creation of facilities to service the new residents. In the past, simply providing well maintained roads may have been all that a local government needed to offer a population, but in today's increasingly urban world, a wide range of facilities and services that were once mere conveniences have become necessities. Therefore, to insure that it lives up to these new responsibilities, Oconee County must carefully plan all of its actions, avoiding waste and inefficiency where possible. If this is accomplished, the disruption resulting from future changes can be minimized, allowing for continued service to current residents, while preparing to meet the needs of those still to come.

### Community Facility Objectives for the Future

The following objectives are intended to address those needs and desires established within the Community Facilities Element. See the 'Goals' section of this plan for specific strategies and timelines for implementation.

1. Work to guarantee adequate water distribution systems for present and future economic development in Oconee County.

2. Improve and expand wastewater treatment within Oconee County.

3. Continue support of a comprehensive planning process so as to insure that the citizens

of Oconee County possess accurate inventories and analyses of existing county

conditions, and the opportunity to better manage anticipated future conditions.

4. Develop and implement an effective Capital Projects Program that provides the highest level of service and facilities for Oconee County's citizens.

5. Explore and evaluate alternative methods of obtaining revenue and grant monies to fund capital improvements and new infrastructure.

6. Create and/or update plans for specific priorities.

7. Complete and properly maintain Oconee County's Geographic Information System (GIS).

8. Encourage development in a way that protects and preserves our natural resources.

9. Manage development in a manner that ensures our natural resources and lifestyle enhance sustainable economic growth and job opportunities.

10. Seek local, state, and federal funding support in efforts to expand and enhance educational opportunities for Oconee County residents.

11. Upgrade solid waste facilities to improve services and allow for needed upgrades and expansion to provide for anticipated growth.

12. Regularly review public safety needs and enhance facilities as required.

13. Work to address the age-related problems that may arise among Oconee County's aging population, particularly focusing on issues not adequately dealt with by state and federal efforts.

14. Upgrade and maintain the county road system in a manner that meets the needs of Oconee County's growing population and provides safe and efficient routes through the county.

15. Continue upgrades to the Oconee County Airport in a manner that not only serves existing clientele, but will establish the facility as one of the premier small airports in the nation.

16. Establish programs to review all existing community facilities to determine needed changes resulting from both the aging of the facilities and the rapid population growth of Oconee County.

17. Promote a countywide arts program to facilitate an appreciation for the arts and other cultural facilities found within Oconee.



## Overview

This element examines current and projected housing conditions, needs, and availability in Oconee County. The chapter begins with an analysis in terms of the age, condition, occupancy, location, type, and affordability of the current inventory of housing available to county citizens. Next, projections of future housing needs in terms of anticipated population levels and economic conditions are explored. The element concludes with goals and policy recommendations based on the expressed wishes of the citizens of Oconee County.

## **Housing Inventory**

Oconee County's housing stock is comprised of a broad mix of housing types, ranging from both stick-built and manufactured single-family units to various types of multifamily housing units. Included among these multi-family types are conventional, public, government subsidized, and assisted-living units. While both stick-built and manufactured single-family units can be found throughout the county, most multi-family housing units, with a few exceptions, can be found in and around the towns of Seneca, Walhalla, and Westminster, where there is existing infrastructure, particularly public water and sewer. The lakes located in the county are driving forces behind the location of new houses, with this trend expected to continue over the next decade. See Table H-1 (below) for a comparison of households located in some of the counties in Upstate South Carolina.

Number								
County	1950	1960	1970	1980	1990	2000	2010	2015
Oconee	9,314	10,445	12,764	17,373	22,358	27,283	37,713	39,020
Anderson	23,573	27,855	33,277	46,944	55,481	65,649	83,752	85,296
Greenville	45,066	58,916	74,191	101,579	122,878	149,556	191,000	199,369
Pickens	10,092	12,854	17,274	25,986	33,422	41,306	50,854	51,731
Spartanburg	38,130	43,314	53,172	69,934	84,503	97,735	121,137	123,931
			1.0.0		1	<i>·</i>		/

Table H-1

Source: U.S. Census Bureau; Office of Research & Statistics

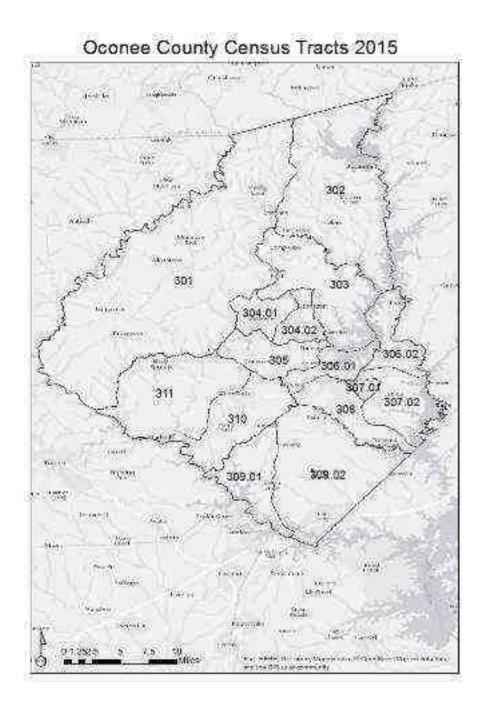
Table H-1 shows a steady increase in the number of new housing units in Oconee County. This increase may be attributed to increased economic activity in Oconee spurred on by the development of the county sewer system, the creation of Lake Keowee and Lake Jocassee, and organized economic development activities. Between 2010 and 2015 Oconee County Gained 1,307 new houses units. The other counties in the upstate built new housing at greater rates during this same period. Oconee County issued 2156 residential building permits during the 2015-2017 timeframe, which encompasses new home construction as well as additions of livable and non-livable space.

At the time of the 2010 writing, Oconee County had experienced a significant decline in building activity due to a nationwide economic downturn. Even though our region had suffered, it has withstood the crisis better than other parts of the country. The scope of the impact of the decline will only be revealed over time, but there is little doubt that there will be long-term implications resulting from this period. As a result, there may be impacts on our housing stock, particularly as some sources indicate that people, heretofore seeking to maximize their homes in terms of size and quality, may begin to 'downsize' in an effort to be prepared for future crises.

## Households by Census Tract

The U.S. Census Bureau divides Oconee County into fifteen separate census tracts. See Figure H-1 below.

### Figure H-1



Census Tract	1980	1990	1999	2000	2004	2010	2015
301	1,053	1421	1601	1704	1694	1821	1730
302	839	1734	2154	2487	2343	2688	2700
303	1,308	1576	1709	2056	1783	2575	2189
304.01	2,320	2896	3218	3159	3380	2683	2523
304.02						711	709
305	1,044	1265	1372	1606	1430	1835	1766
306.01	2059	2597	2861	2978	2993	1900	1988
306.02						1851	1883
307.01	2635	3328	3681		3862	1570	1690
307.02				1623		2408	2415
308				1968		3005	2851
309.01	1747	2040	2205	2301	2301	1079	1132
309.02	1604	2238	2542	2692	2692	2912	2954
310						2168	1910
311	1681	2002	3371	3974	3974	1470	1466
TOTAL	17373	22358	26063	27947	26452	30676	29906

The table below shows the number of households in each census tract in Oconee.

Table H-2

Source: 2000 Oconee County Economic Profile (ACOG), 2000 Census, 2015 American Community Survey

The data indicate that all areas of the county experienced significant growth between 1980 and 2010. Census Tract 302, which encompasses much of the fast developing Lake Keowee area, has experienced the greatest increase in the number of households since 1980, having increased 320%. Overall, the 2010 Census revealed that there were 30,676 households in the county.

## **Housing Units**

The U.S. Census Bureau defines a housing unit as a habitable dwelling that includes individual single-family dwellings, duplexes, apartments, condominiums, and other habitable dwelling components, whether currently occupied or vacant.

The following table illustrates the number of housing units in Oconee and other upstate counties.

Housing Units in Upstate South Carolina, 1950-2015									
County	1950	1960	1970	1980	1990	2000	2015		
Oconee	9,999	11,757	14,032	20,226	25,983	32,383	46,402		
Abbeville	6,329	6,262	7,099	8,547	9,846	11,658	12,009		
Anderson	24,890	30,083	35,981	51,359	60,753	73,213	86,078		
Cherokee	9,051	10,060	11,605	14,955	17,610	22,400	24,052		
Greenville	47,857	64,140	79,939	108,172	131,645	162,803	203,415		
Greenwood	11,560	13,980	16,524	21,017	24,735	28,243	31,206		
Laurens	12,423	14,082	15,810	19,628	23,201	30,239	30,611		
Pickens	10,898	13,799	18,673	28,469	35,865	46,000	52,410		
Spartanburg	39,699	45,971	56,801	75,833	89,927	106,986	47,179		
Union	7,990	8,396	9,499	11,393	12,230	13,351	13,984		

#### Table H-3

Source: South Carolina Revenue and Fiscal Affairs Office

The number of housing units in Oconee County has undergone rapid growth since 1950, has increased approximately 364% during the period between 1950 and 2015. This places Oconee in the top 3 counties in the upstate, along with its neighboring mountain counties of Pickens and Greenville (they increased 322% and 240% respectively). It should be noted that during the last several decades, the number of units in Oconee increased at least 25% per decade, with the greatest growth occurring during the 1970's. Currently, census estimates show the number of housing units has increased roughly 43.29 percent between 2000 and 2015.

Table H-4 (below) breaks down the housing units by both municipality and unincorporated areas.

1980-2015 Housing Unit Totals for Oconee County and Municipalities									
Jurisdiction	1980	1990	2000	2015	% Change 2000- 2015				
Salem	90	92	72	77	6.94				
Seneca	3005	3367	3677	4,076	10.85				
Walhalla	1649	1726	1705	1,852	8.62				
Westminster	1303	1367	1333	1,227	-7.95				
West Union	128	131	145	150	3.44				
Unincorporated Areas	14,051	19300	25451	39,020	53.31				
Total	20,226	25,983	32383	46,402	43.29				

#### Table H-4

Source: 2000 Oconee County Profile (ACOG); 2006-2007 Oconee County Profile (ACOG)

The table shows that Seneca experienced the greatest growth of all the municipalities with a 10.85% increase between 2000 and 2015. West Union and Salem experienced the least growth. By percent, housing units in the unincorporated areas of the County grew 43.29% while the housing units in the municipalities grew only 6.5% in the same time. By the number of housing units, the number grew almost 30 times as much in the unincorporated areas of the County as compared to the municipalities.

#### **Occupancy Status**

The American Communities Survey 2015 shows that in 2015 there were 46,402 housing units in Oconee County with 8,087 vacant at the time the data was collected. Of these, 26,444 units were owner-occupied. Table H-5 (below) illustrates some of the characteristics of unit occupancy and the extent of change between 1980 and 2015.

Oconee Cou Charac					
	1980	1990	2000	2015	% Change 2000-2015
Total Persons	48,611	57,494	66,215	74,949	13.19
Total Housing Units	20,226	25,983	32,383	46,402	43.29
Total Vacant Units	1,665	3,625	5,100	8,087	58.56
Households	17,373	22,358	27,283	30,676	12.43
Persons per Household	2.8	2.6	2.4	2.4	0
Families	13,723	16,875	19,589	21,118	7.81
Persons per Family	3.2	3.0	2.9	2.86	-1.37

Source: US Census Bureau

Table H-5 illustrates the total number of housing units has undergone a steady increase since 1980; at the same time, the number of persons per household has declined slightly.

#### Rural versus Urban

Although there is a fast-growing urban cluster inside Oconee County, the vast majority of county residents still live in rural areas. In 1970, the U.S. Census Bureau reported that 70.1% of Oconee residents lived in rural areas; by 1990, this number had increased to 74.6%. By 2000, however, this trend has reversed, with the percentage of rural residents falling to 70.9%. The rural population continued to fall over the next ten years to 64.92% based on the 2010 Census of Population. This may be due, in part, to an addition of four Census tracts and the annexation of land by municipalities. Table H-6 (below) illustrates the division between rural and urban in 2010.

 Table H-6 – Urban and Rural Population: Census 2010

	Total Population	Urban	Rural	Urban % Change from 2000	Rural % Change from 2000
Oconee County	74243	26054	48219	+33.7	+3.2

Source: United States Census Bureau

## **Type and Value of Housing Stock**

Oconee County's housing stock is comprised of a mix of housing types, age, and affordability levels. In 2015, the majority of housing units had 3 bedrooms. A mean of 2.36 persons lived in owner-occupied housing units, while a mean of 2.64 persons lived in renter-occupied housing.

Many individuals in Oconee County rely on manufactured housing, particularly for low-cost dwellings. In 2000, the Oconee County Council adopted an ordinance that banned the importation of any manufactured home into the county if it was constructed before June 1976. While the ban did not immediately impact any structure that was already located in the county at the time of adoption (such units were exempted), the regulation will remove, over time, those potentially hazardous manufactured homes constructed before federally mandated minimum standards were adopted. In 1990 there were 6,444 manufactured homes registered in Oconee County, of which 5,218 were occupied. As of 2013, there were 8,396 manufactured homes, which represented 21.7% of Oconee County's housing stock. (State Data Center, Div. of Research & Statistical Services).

An examination of the value of Oconee's single-family housing stock reveals structures ranging from extremely low-value (sometimes substandard) to custom luxury homes situated in exclusive lakefront communities. While the exact number of homes not meeting minimum occupancy standards established by adopted building codes is unknown, 2010 census figures indicate that the amount is relatively small.

As noted above, multi-family housing units are predominantly located in or near the municipalities. According to the 2010 Census, few such units had been constructed in unincorporated areas. Due to the limitations imposed on obtaining sewer service for projects outside town boundaries, however, few units are being constructed in unincorporated areas. As a result, the multi-family housing stock is aging. In addition, rents on a significant number of units in the county are subsidized by governmental funds, expanding low-cost housing options for many people. U.S. Census data indicates that in 1994 there was a 98.9% occupancy rate (636 units) for subsidized rental units. There was a 9% vacancy rate for the 554 conventional units available in the county. As of 2017, the County is home to 20 low-income housing apartment complexes containing 1,189 affordable apartments for rent. Many of these rental apartments are income based housing with about 846 apartments that set rent based on income. Often referred to as "HUD apartments", there are 285 Project-Based Section 8 subsidized apartments in Oconee County. There are 792 other low-income apartments that do not have rental assistance but are still considered to be affordable housing for low-income families (South Carolina Regional Housing Authority 1).

The estimated median value of owner-occupied housing in 1999 ranged from \$58,424 in Census Tract 307 (east of Seneca) to \$227,551 in Census Tract 302 (near Lake Keowee). Countywide the median home value stood at \$91,300, in 1999. This table shows the value of housing distributed by census tract.

As of 2015, there were 365 owner-occupied homes worth at least \$1,000,000. Tracts 303 and 306.02, which lie adjacent to Lake Keowee, are the location of the greatest number of homes valued over \$1,000,000, with 178 or 49% of all such units in the county lying within the two tracts.

The figures in Table H-8 were updated according to the data released by the 2000 Census and the 2015 American Community Survey. Census tract 302, on the shores of Lake Keowee, continues to have the highest median value home; although the updated table shows a decrease in median value, possibly due to the number of new homes being built. The two next highest tracks are 303 and 306.01, which are also located on the shores of Lake Keowee. Census Tract 306 was broken into two separate Census tracts, 306.01 and 306.02.

Estimated Value of Owner-Occupied Housing by Census Tract, 1999											
Tracts	Median	Number of Units Per Value Range									
	Value										
		<\$75K	\$75K-\$100K	\$100K- \$150K	\$150K- \$200K	\$200K- \$300K	\$300K- \$400K	>\$400K			
301	60,403	396	103	79	24	8	1	0			
302	227,551	252	112	94	66	252	165	217			
303	84,186	323	132	125	57	71	26	9			
304	65,326	995	303	211	59	21	3	2			
305	74,897	325	207	91	19	5	1	0			
306	107,551	525	300	417	164	258	88	46			
307	58,424	1219	292	220	48	17	1	4			
308	70,524	568	212	162	47	29	4	0			
309	67,697	545	179	130	52	26	6	4			
310	71,267	797	329	260	46	40	5	4			
311	63,846	325	96	96	16	1	0	0			

 Table H-7: Source:
 2000 Oconee County Profile (ACOG)

#### Table H-8

Estimated Value of Owner-Occupied Housing by Census Tract, 2000 Census										
Census Tract⊡	Total:	Median Home Value	Less than \$50,000	\$50,000 to 99,999	\$100,000 to \$149,999	\$150,000 to \$199,999	\$200,000 to \$249,999	\$250,000 to \$299,999	\$300,000 to \$399,999	Greater than \$400,000
301	735	82,700	139	351	115	83	21	14	7	5
302	1,493	210,100	126	237	178	159	231	122	209	231
303	999	134,500	93	280	227	168	44	54	69	64
304	1,683	86,300	297	745	387	189	39	2	15	9
305	785	86,200	94	452	162	33	5	0	21	18
306	1,990	131,500	190	497	466	204	193	132	128	180
307.01	724	60,300	244	388	85	7	0	0	0	0
307.02	1,015	96,300	95	435	185	194	71	14	7	14
308	1,278	99,600	57	588	380	112	41	74	8	18
309	1,382	99,200	73	626	343	183	60	35	50	12
310	989	78,600	248	406	224	87	0	8	16	0
311	523	75,300	105	307	80	25	6	0	0	0
U.S. Census Bureau 2000 Census										
Estimated Value of Owner-Occupied Housing by Census Tract, 2015 ACS										

Census Track	Total:	Median Home Value	Less than \$50,000	\$50,000 to 99,999	\$100,000 to \$149,999	\$150,000 to \$199,999	\$200,000 to \$299,999	\$300,000 to \$499,999	\$500,000 to \$999,999	Greater than \$1 Million
301	1499	154000	193	313	198	356	271	132	18	18
302	2,384	233,700	311	283	203	261	339	435	473	79
303	2,382	174,800	314	258	357	285	195	425	460	88
304.01	1,489	114,300	259	410	290	229	213	69	19	0
304.02	584	137,200	106	114	97	117	102	41	0	7
305	1,386	100,000	277	416	258	172	130	95	38	0
306.01	1,325	250,050	117	108	170	137	177	355	211	50
306.02	1,313	183,600	94	135	271	237	175	205	106	90
307.01	1,028	87,600	186	476	176	145	21	16	0	8
307.02	1,554	142,100	246	296	287	302	306	79	38	0
308	1,888	151,500	288	397	145	315	248	339	56	0
309.01	1,025	214,900	248	72	67	104	171	316	37	10
309.02	2,415	110,700	594	535	306	206	299	310	150	15
310	1,376	116,600	295	279	340	192	158	81	27	4
311	996	91,700	355	168	105	172	134	41	21	0
U.S. Census Bureau 2015 American Community Survey										

## **Seasonal/Temporary Housing**

Many homes surrounding Oconee's lakes are second homes, used primarily on weekends and for vacations (and occasionally as rentals). The number of seasonal housing units, as defined by the Census Bureau, is significant as shown in H-9 and H-9A.

Seasonal Housing Units in Selected Upstate Counties, 1950-2000									
County	Seasonal Units	Seasonal Units	Seasonal Units	Seasonal Units					
	1950	1970	1990	2000					
Oconee	90	110	1,703	2634					
Pickens	181	92	333	800					
Anderson	102	165	1,347	1811					
Greenville	404	56	722	1550					

Source: State Data Center, Office of Research & Statistics 2000 Census

The number of seasonal housing units in Oconee County has grown tremendously since 1950. The table above shows that growth in seasonal units was slow between 1950 and 1970, but was subject to a tremendous increase between 1970 and 2000. The 2000 Census reveals that the number of seasonal units in Oconee rose another 36% to 2,634 As of the 2010 Census the Seasonal Units made up 48.6% of the vacant housing stock, see H-9A below.

#### Table H-9A

# 2010 Housing Units for sale, rent or seasonal, recreational or occasional use

Geographic area			Vacant	Vacant housing units			
			Total	Percer	Percent		
	Total	Occupied		For	For	Seasonal,	
	housing	housing		sale	rent	recreational,	
	units	units		only		or	
						occasional	
						use	
Oconee County	38,763	30,676	8,087	9.2	15.7	48.6	
Census Tract 301	2,645	1,821	824	4.1	3.9	64.3	
Census Tract 302	3,889	2,688	1,201	10.1	11.5	64.8	
Census Tract 303	3,423	2,575	848	7.5	9.9	62.5	
Census Tract 304.01	3,044	2,683	361	9.1	33.2	9.7	
Census Tract 304.02	892	711	181	9.9	9.4	58.6	
Census Tract 305	2,177	1,835	342	10.2	21.9	38.3	
Census Tract	2,323	1,900	423	12.5	25.3	44.2	
306.01							
Census Tract	2,151	1,851	300	12.0	27.7	27.3	
306.02							
Census Tract	1,867	1,570	297	13.5	38.0	5.1	
307.01							
Census Tract	2,928	2,408	520	11.3	26.0	38.5	
307.02							
Census Tract 308	3,463	3,005	458	12.2	28.2	24.0	
Census Tract 309.01	1,921	1,079	842	6.4	3.0	82.7	
Census Tract 309.02	3,601	2,912	689	8.3	10.9	46.0	
Census Tract 310	2,634	2,168	466	14.4	18.0	29.6	
		,					
Census Tract 311	1,805	1,470	335	6.3	16.1	21.5	

Source: U.S. Census Bureau, 2010 Census.

This growth in seasonal housing during the 2000's reflects the impact of the development of Lakes Keowee and Jocassee, which resulted in a great increase in second homes. As seen in table H-9A, by 2015, almost half of the County's vacant housing stock was seasonal, recreational, or occasional use.

Oconee County is the location of the Duke Energy's Oconee Nuclear Station, one of the premier nuclear facilities in the nation. While there is no doubt that the county has reaped many benefits from having the facility within its borders, the plant's activities often influence the lives of Oconee's citizens in unforeseen ways. This is particularly true regarding the effect that both regular and unscheduled maintenance and repair work has on the local demand for temporary housing (both single-family units and multi-family units). The nuclear station's utilization of large numbers of subcontractors and temporary workers occasionally results in full capacity situations in available temporary housing in the surrounding region. To take advantage of the short housing supply, some property owners offer rental units traditionally leased by the year for shorter terms, typically for higher rents that would be received for a standard lease. To this point, Oconee County's available housing stock, along with that in adjoining counties, has proven to be sufficient to provide for temporary workers for limited periods. Any comprehensive examination and plan for future housing in the county, however, should not ignore these occasional drastic changes in demand.

## **Affordable Housing**

In 2007, the State of South Carolina passed the Priority Investment Act, which expanded the requirements of the Housing Element to include a detailed discussion of affordable housing. In Oconee County, housing prices have risen faster than family income, thereby creating a significant deficit for many individuals or families trying to pay for a home. According to one source, the value of a median-priced house in Oconee County rose by 71.4 percent between 1990 and 2000; at the same time, the median income of the county increased by only 39.5 percent.<sup>1</sup> The median home value in 1999 for the County was \$91,300 and in 2015 was \$147,035. So, what is considered "affordable" housing, and why is it important?

Affordable housing is plagued with misconceptions in public perception that may be the biggest barrier to overcome. The Campaign for Affordable Housing<sup>2</sup> has identified five of the most common myths surrounding affordable housing.

Five Common Myths Regarding Affordable Housing <sup>3</sup>					
MYTH		TRUTH			
Affordable housing is ugly.		Affordable housing is designed to fit the community character in size and style. It is typically privately owned, designed, and developed. Like everything else, the cost of a home has little to do with whether or not it is ugly.			
Affordable housing increases traffic.		All types of development impact traffic volume.			

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<sup>&</sup>lt;sup>1</sup> Eldridge, Diane. "Affordable Housing in the Upstate." The Upstate Advocate. December 2003.

<sup>&</sup>lt;sup>2</sup> <u>www.tcah.org</u>

<sup>&</sup>lt;sup>3</sup> ibid

	Affordable housing is best suited near employment centers, which would decrease dependency on the automobile. The National Personal Transportation Survey found that low-income households make 40% fewer trips than other households. Studies indicate that the average resident in a compact neighborhood will drive 20-30% less than residents of a neighborhood half as dense."
Affordable housing increases crime.	There is no correlation between safe, decent, and affordable housing and crime. In fact, studies show that a major cause of crime and a host of other socio-economic ills is community disinvestment, overcrowding, lack of jobs and community services.
Affordable housing over-burdens schools and infrastructure.	<ul> <li>Studies show that the traditional single-family home neighborhood has 2 to 3 times the number of school-aged children than those living in apartments.□</li> <li>U.S. Office of Technology Assessment found that it costs 10,000 dollars per unit more to provide infrastructure to a lower density/urban development than a more compact urban development (OTA-E11-643, 1995. Infrastructure costs significantly decline as density increases.</li> </ul>
Affordable housing lowers property values.	Academic studies and market analyses prove otherwise. A Study by Wayne State Univ. found that affordable housing often has an insignificant or positive effect on property values in higher value neighborhood and improves values in lower-valued neighborhoods.

Most people agree that safe, decent, and affordable housing is an important component of a good society; but beyond just providing people a place to stay that they can afford, some contend that it positively influences the economy, and even improves the quality of our environment. As stated by one planning expert, "The housing problem that affects the most Americans today is cost burden, which happens when families spend so much for housing that their ability to pay for the other necessities of life is compromised."<sup>4</sup> Of course, the dollar amount considered affordable varies widely from region to region, depending upon the amount of wealth that flows throughout the local economy. To deal with this variability, the federal government has adopted the standard that households spending 30% or more of their gross household income for housing are burdened, and those spending 50% or more for housing are severely burdened.<sup>5</sup> As more and more individuals find themselves in this situation, the broader economy suffers from the lack of discretionary income. In addition, with less money available, normal and routine maintenance of housing also decreases, which in turn expands the amount of substandard housing in a community. There is also the fact that, as housing becomes less affordable in an area, development moves away from higher cost areas to lower ones, increasing the

 <sup>&</sup>lt;sup>4</sup> Mallach, Alan, FAICP. "The Case for Affordable Housing." Planning. March 2009. pg. 33
 <sup>5</sup> Ibid.

need for infrastructure in rural lands, which itself fuels more sprawl. Finally, affordability also influences industry recruitment, for companies want their employees to live close to their workplace. When the average worker cannot afford to live in a given area, employers will naturally look elsewhere.

Affordable housing also engenders a sense of community, for by placing housing within the price range of those that form 'the backbone' of our society and economy, neighborhoods are stabilized by the presence of those groups that tend to support and sustain those activities that establish an identity. Further, "stable housing boosts the educational performance of children, induces higher participation in civic and volunteer activity, improves healthcare outcomes, and lowers crime rates, and lessens welfare dependency."<sup>6</sup> One of the keys to beginning a discussion on any issue is to define the terms involved in order to ensure that there is a minimum of confusion. The South Carolina Priority Investment Act defines Affordable Housing, in the case of dwelling units for sale, as

"housing in which mortgage, amortization, taxes, insurance, and condominium or association fees, if any, constitute no more than twenty eight percent of the annual household income for a household earning no more than eighty percent of the areas median income, by household size for the metropolitan statistical area as published by the U.S. Department of Housing and Community Development (HUD) and, in cases of dwelling units for rent, housing for which the rent and utilities constitute no more than thirty percent of the annual household income for a household earning no more than eight percent of the area median income, by household size for the metropolitan statistical area as published from time to time by HUD."

Distilled to a formula, the definition is:

Affordability =  $28\% \times (80\% \times \text{Areas Annual Household Income (per HUD)}$ Table H-11 (below) contains the 2017 income limits for 30% and 60% of median income for most upstate counties.

Table H-11

	1 person	2 people	3 people	4 people	5 people	6 people	7 people	8 people
30% LIMITS	11000	12550	14100	15650	16950	18200	19450	20700
VERY LOW INCOME	18250	20850	23450	26050	28150	30250	32350	34400
60% LIMITS	21900	25020	28140	31260	33780	36300	38820	41280

2017 Adjusted Home Income Limits for affordable housing

<sup>6</sup> South Carolina Priority Investment Act: Implementation Guide for Local Governments. American Planning Association South Carolina Chapter: Making Great Communities Happen. First Edition. October 15, 2008. pg. 29 Rental units are also a critical component of affordable housing in a community. According to a U.S. Census Bureau Report, down payment assistance would do more to improve the affordability of a modestly priced home for renters than lower down payment requirements (which would increase monthly mortgage payments) or major reduction in interest rates. Financial assistance would, however, require funding from another source, ideally from a party that has no financial gain from the transaction, such as employers, nonprofit groups, or a governmental agency.<sup>7</sup>

Affordability standards for rental units were also established by the Priority Investment Act, and are determined by the following formula:

Affordability (Rental) = 30% x (80% x Areas Annual Household Income (per HUD))

## **Barriers to Affordability**

The lack of affordable housing can result from a variety of reasons. In 2004, the United States Census Bureau published a brief report entitled: "Who Could Afford to Buy a Home in 2004"<sup>8</sup>, which looked at some of the trends in housing affordability in 2004. According to this report, 58 % of all American families could afford to buy a modestly priced home in the state where they resided, provided the home was valued in the bottom 25 % of the regions home value distribution. Estimating the bottom 25% range of housing values (see table: "Estimated Value of Owner-Occupied Housing by Census Track, 2000 Census") for Oconee County shows that 58% of residents could indeed afford a home that cost less than 100,000 dollars, provided there were no external limiting factors. According to the U.S. Census Bureau report, among barriers that prevented people from purchasing a home were generally: excessive debt, lack of down payment, poor credit, and interest rates that took the home out of the affordability range. Naturally, the government is very limited in what it can do to change the personal choice of an individual to acquire excessive debt or create a bad credit history. Therefore, other avenues must be pursued to assist with making housing affordable.

The South Carolina Priority Investment Act Implementation Guide for Local Governments identifies some of the non-essential regulations that may become possible barriers to affordable housing. Of those identified, very few apply to the current regulatory climate of Oconee. Table H-12 (below) identifies various regulations that may influence the affordability of housing in Oconee County and evaluates the strengths and possible areas of concern.

<sup>&</sup>lt;sup>7</sup>Savage, Howard A. "Who Could Afford to Buy a Home in 2004?" United States Census Bureau. Issued May 2009.

<sup>&</sup>lt;sup>8</sup> Savage, Howard A. "Who Could Afford to Buy a Home in 2004?" United States Census Bureau. Issued May 2009.

#### Table H-12

	Oconee County's Land and Housing Ordinances						
Code of Ordinances	Strengths	Areas to look at in light of affordable housing issue					
Chapter 6: Building Code Regulation	Protects homeowners from poor construction that can devastate a new homeowner□ Ensures health and safety of residential and multi-family construction	Analysis could be undertaken to identify barriers unrelated to health and safety that may prevent affordability but change would have to come from the State level, as building codes is a mandate for local governments					
Chapter 16: Flood Ordinance	Prevents loss in cases of catastrophic flood events						
Chapter 26: Roads and Bridges	Provides for gravel roads, that meet fire code for those developments of ten units or less	Sidewalks					
	Provides a mechanism to reimburse a developer who is required to upgrade a county road and also encourages developers to provide affordable housing (see section 26-5)						
Chapter 32:							
Unified Performance Standards Article V: Group Homes		Ordinance should be reviewed and adjusted					
		1,000 feet separation from nearest residence					
Article VI: Land Development and Subdivision Regulations	Administrative Review of all development Clearly defined review process Lot sizes vary with the type of sewage treatment, with most restrictive for traditional septic (state minimum) of .57 acres. Exempts Family Transfers One cost for review at time of preliminary application	Security in Lieu of Completion of 125 % of total cost before final plat can be recorded Development where no land is subdivided but still requires a review due to definition of subdivision to include dwelling units					

Chapter 34: Utilities		Look at possible payback mechanisms for developers when they need to upgrade system Article V: Sewer Impact Fee
Chapter 38: Zoning	Tool that can be used to minimize the negative impacts of incompatible land uses in community Citizen Initiated "Control Free District, which, as the name indicates, imposes no use limitations on the parcel, [apart from perhaps setback requirements to the extent they are considered use limitations,] but establishes the conditions necessary to overlay limited performance standards in certain areas." Manufactured Housing is not treated differently than stick built housing	Ordinance needs to provide for both Traditional Neighborhood Development (TND's) and Planned Unit Developments (PUD's) New to County and issues still need to be worked out.

A review of Table H-12 shows that, compared to neighboring counties, Oconee County's regulatory climate is open to affordable housing. Still, there is room for improvement, and all regulations governing development, existing and proposed, need to be examined with an eye toward increasing 'friendliness' toward affordable housing. Of more importance in the short term, however, is the need for Oconee County to partner with non-profits and other organizations that can help guide citizens in getting into a home of their own. To this end, a community housing task force should be considered the top priority. Once created, this entity could be charged with not only working to foster the development of affordable units but also with monitoring situations that serve as potential impediments.

The Priority Investment Act also requires local governments to analyze marketbased incentives that may be available for the development of affordable housing. The Priority Investment Act Implementation Guide for Local Governments identifies a number of market-based incentives that may be considered for suitability for incorporation into the development standards and practices of Oconee County.

Table H-13
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Implementation Guide for Local Governments: Market-Based Incentives for Developers				
Incentive	Summary			
Density Bonuses	"Developers who commit to allotting a certain percentage of units at below market rates may be allowed to reduce lot sizes or increase the number of houses on a lot, thereby reducing land cost per unit."			
Relaxed Zoning Regulations	page 30 "Modification to regulations such as minimum lot area requirements, limitations on multi-family dwellings, minimum setbacks, variances, reduced parking requirements, and modified street standards are essential to the streamlined development of affordable housing."			
Reduced or Waived Fees	Counties could look at reducing or waiving fees for projects that incorporate a determined percentage of the development as affordable units. "This may include reimbursements or permit fees to developers whose developments are certified as affordable and also waiving up to 100% of the water or sewer tap fees for affordable units." page 31			
Fast Track Permitting	Basically, streamline the permitting process with pre-approved house plans, a comprehensive pre- application review for major projects, and create central permitting location			
Design Flexibility	"Loosening design flexibility involves creating pre- approved design standards to allow for quick and easy approval. Infill development, mixed-use projects, and accessory dwellings are promoted."			
Transfer of Development Rights	<ul> <li>page 31</li> <li>"A TRD program permits landowners to shift densities from one site to another through a negotiated transaction. Under this approach, a landowner in a "sending" area could sell development rights to landowners in a "receiving area."<sup>9</sup></li> <li>"TDR programs operate through the transfer of development rights, or units, of density from one geographic area to another within the region." page 32</li> </ul>			

<sup>&</sup>lt;sup>9</sup> Freilich, Robert H. and S. Mark White. 21<sup>st</sup> Century Land Development Code. With Kate F. Murray. American Planning Association: Washington, D.C. 2008 p 110-111

Impact Fac Examplions	"Whathar impact face would be considered
Impact Fee Exemptions	"Whether impact fees would be considered "nonessential housing regulatory requirement," is unclear, but this affordable housing exemption may remove a potential barrier to the development of affordable housing and would be appropriate for consideration in a designated priority investment zone."
	page 34.
	If Oconee County ever chooses to look at impact fees, considerations will need to be given for affordable housing.
Growth Related Public Facilities Standards	This market-based incentive, when affordable housing is an issue, would adjust the level of public service standards that some communities put into place so that infrastructure keeps up with demand and maintains an acceptable level of service.
Urban Growth Boundaries	"The PIA ( <i>Priority Investment Act</i> ) provides for the establishment of a priority investment zone, within which traditional neighborhood design and affordable housing must be permitted. The urban growth boundary concept, while not authorized by the PIA expressly, is consistent with the priority investment zone concept. For example, the priority investment and a "developing area" <i>boundary</i> may be one in the same." page 37; italics mine
Development Agreements	"The development agreement is a local government planning and implementation tool that may be used to meet the intent of the Priority Investment Act." page 37
	State law is very specific as to the standards and requirements of utilizing a development agreement. The specific standard can be found in "The South Carolina Government Development Act."
Tax Increment Financing	This is a complex statute in State Law that basically allows for the redevelopment of an area and the increase of that revenue to be returned back for specific purposes
Overlay Zoning Districts	According to the SC Planning Act overlay, zones may impose or relax a set of requirements imposed by the underlying zoning district when there is a special public interest in a particular geographic area that does not coincide with the underlying zone boundaries.
	In this case, overlay zones may be used to relax a set of requirements, which would provide an incentive for affordable housing in that location.

Local Government Improvement Districts	The mechanism provides in State Code that allows local government to plan and implement public infrastructure improvements and to apply assessments on property within the district, with the concurrence of property owners, to pay a portion of the cost of the improvement. page 41
Special Property Tax Assessments	S.C. Code sec. 4-9-195, et seq. authorizes counties to temporarily abate property taxes for a period of up to twenty years on all or a portion of the value added to real property resulting from an approved rehabilitation. This may be used as an incentive for renovations of low to moderate-income rental property. page 44

## **Permitted Construction**

#### Table H-14

	FY2005	FY2006	FY2007	FY2008	FY2009
<b>Total Permits</b>	2197	2288	1667	2207	1315
1&2 Family	756	795	783	746	267
Mobile Home	306	397	217	252	255
Commercial	102	120	140	218	121
	FY2005	FY2006	FY2007	FY2008	FY2009
	\$	\$	\$	\$	\$
Fees Paid	745,963	976,280	876,607	808,910	505,628
Valuation	\$226,033,418	\$269,450,530	\$195,969,711	\$312,086,529	\$127,053,545
Budget	\$400,934	\$530,395	\$617,740	\$660,606	\$623,512

	FY2012	FY2013	FY2014	FY2015	FY2016
Total					
Permits	1185	1333	1731	1780	2372
1&2 Family	2248	3340	4430	3906	6645
Mobile					
Home	0	2	4	5	3
Commercial	133	139	163	182	178
	FY2012	FY2013	FY2014	FY2015	FY2016
Fees Paid	\$362,991.00	\$310,000.00	\$275,149.00	\$312,593.00	\$440,933.00
Valuation	\$119,868,072. 00	\$144,677,195. 00	\$54,208,640. 68	\$63,607,908. 21	\$82,959,382. 63
Budget	\$488,342.00	\$499,864.00	\$615,123.00	\$610,707.00	\$802,088.00

#### Table H-14 continued,

	<u>Worklo</u>	ad Indicators
Activity	FY2010	FY2011
	Actual	Actual
Permits Issued	1,000	1,076
Inspections Performed	4,664	3,583
Commercial Plan Review	147	69
Planning		
Land Use Reviews	150	278
Floodplains Reviews	1100	250
Meetings/Events	80	90
Projects	90	90
Zoning		
Zoning Permits	1184	887
Rezoned Parcels	0	3,403
Field Inspections	110	160
Public Inquires	1,000	1,000

Construction activity increased in Oconee County during the 1990's, posting significant gains in each year from 1995 onward. It should be noted that the figures shown in Table H-8 reflect permits issued by the Oconee County Tax Assessor's Office. On July 1, 1999, the newly created Oconee County Building Codes Department began operations, assuming the responsibility of permitting all construction activity. Operation of the Building Codes Department required more money than the county had been receiving from permits sold by the Tax Assessor's Office. The county, therefore, turned to the fee schedule recommended by the Southern Building Codes Congress International (SBCCI) to cover the additional costs, which resulted in higher permit prices. The rates were based on a regional standard recognized throughout the south, bringing Oconee into line with other jurisdictions operating building code programs. Construction activity continued to increase through 2006 but declined in 2007. Activity for 2008 increased, primarily due to the addition of a new patient tower at Oconee Memorial Hospital. With the national financial recession of 2009, construction numbers declined dramatically. A steady increase in building permits issued has been seen between 2012 and 2016. Note: FY 2010 and FY2011 had records kept in a different format.

Oconee County Building Codes has traditionally provided a surplus revenue stream into the general county budget from permit fees, the exception being in 2001 and 2009 during times of lower construction activity.

## **Construction and Development Standards**

The Oconee County Building Codes Department began operation in July of 1999. It was at this time that Oconee County began enforcement of the state approved codes. Manufactured homes, which are constructed to federally mandated standards, are only inspected during setup, at which time state regulations governing various aspects of the process are enforced. All inspectors employed by the department are certified by the

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South Carolina Building Codes Council and are required to pass a series of certification exams conducted by the International Code Council (ICC). In addition, all contractors working in Oconee County must be licensed or registered (depending on the particular project) by the state of South Carolina. As a result of the actions of the Building Codes Department, overall quality in construction activity in Oconee County has increased significantly. While Oconee County has traditionally been fortunate to have a pool of good builders to provide safe, high-quality structures for the public, there have been instances when less-scrupulous individuals have taken advantage of Oconee's citizens. Active code enforcement, therefore, offers Oconee's citizens a much higher level of protection than was available to them before. New efforts were promoted to ensure cooperation with other departments and agencies to safeguard the public and ease the permitting process. In 2006, the County added a Fire Marshal position to Building codes to facilitate fire inspections. Also, the 911 addressing coordinator was moved from the GIS map room to Building Codes to smooth the progress of both construction permitting and zoning. In 2008 staff obtained certification as floodplain managers to help with FEMA mandated flood management.

#### Analysis

An examination of Oconee County's housing reveals much strength. The county is blessed with a wide variety of housing options; however, there is a need for more affordable housing not only in Oconee but also in the region. In addition, the median year of construction for housing stock is 1972, which is either roughly similar to, or in some cases, younger than the housing stock in other counties of the region. While it is true that most of the newest high-cost single-family units are being located near the county's lakes, it is still possible to find units representing all price levels throughout the county; although they are becoming harder to find. Except for lakefront units, which are typically among the most expensive locations, it is still possible for individuals to find at least some housing suitable to their economic situation in most areas of the county, although this trend is changing. Another positive aspect of Oconee's housing is the high ownership rate, which can be seen as an indicator of stability at the community level. In spite of a large inflow of people, which in some circumstances may prove to be a detriment, newcomers to Oconee have helped to raise the level of ownership. Many recent arrivals, particularly retirees, have purchased or built homes before they move into the county. Overall, the county has reaped many benefits from the effects of the large numbers of newcomers.

One apparent weakness in the current housing stock is the low number of available mid-level housing units. Low-cost housing needs are generally being met by a mix of subsidized multi-family dwellings, older single-family units (both rented and owned), and a rapidly increasing manufactured home supply. At the other end of the economic scale is high-cost housing, which is easily attained by those that can afford it. The supply of good quality mid-level housing units, however, is restricted. Part of the problem stems from the attractiveness of the county itself, for as long as Oconee continues to draw a large number of retirees desiring higher-cost housing, many of the area's developers will continue to develop profitable communities of higher-cost custom homes. Another factor lies in the limited development of the sewer system, which is currently restricted to areas near the municipalities. Land prices also contribute to the

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problem and, in Oconee, they are climbing faster than the average person can afford, which increases the problem of providing good quality, mid-level affordable housing. Still, with an average cost per housing unit that is significantly higher than neighboring counties, and is, in fact, more than twice the average of some upstate counties, upper-end housing is dominating the housing scene.

Some of the problems affecting housing in Oconee County, that continue to be of concern, include: the persistence of substandard housing; locating homes with septic systems in environmentally sensitive areas; losing prime agricultural land to development; and dealing with the effects of incompatible land-uses located next to residential areas. (Most of these issues are dealt with in detail in the Land Use Element.)

## Housing Objectives for the Future

The following objectives are intended to address those needs and desires established within the Housing Element. See the 'Goals' section of this plan for specific strategies and timelines for implementation.

1. Continue to monitor closely Oconee County's compliance with state and federal airquality standards, adopting and maintaining reduction strategies as necessary.

2. Create and/or update plans for specific priorities.

3. Complete and properly maintain Oconee County's Geographic Information System (GIS).

4. Encourage development in a way that protects and preserves our natural resources.

5. Promote and enhance access to affordable housing through both public and private cooperation.

6. Continue support of a comprehensive planning process to ensure that the citizens of Oconee County possess accurate inventories and analyses of existing county conditions, as well as the opportunity to better manage anticipated conditions.



## **Economic Development Element**

## Overview

This element examines historic trends and projections concerning Oconee County's labor force, commuting patterns, employment characteristics and trends, infrastructure, and other matters impacting the

economic growth of Oconee County. In addition, the latest census data and employment trend information will be used to analyze the county's economic base. This element will also include statements of goals and policy recommendations based on the expressed wishes of the citizens of Oconee County.

### **Labor Force**

#### Population

Oconee County's labor force is primarily drawn from a local population that has grown steadily during the last several decades. According to the 2000 Census, the number of county residents rose 15.2% between 1990 and 2000, reaching a total of 66,215 residents at the time of the count. According to the 2010 Census, the number of County residents rose by 8,058 residents, an increase of 10.1%. Population projections for 2020 show an estimated 78,900 residents, a 16 % increase from the 2000 count and a 5% forecasted increase over the 2010 figure. See Table ED-1 for a historical view of the growth of Oconee County's population.

#### Table ED-1

Oconee County Population 1960-2010, w/2020 and 2030 projects Projections									
	1960	1970	1980	1990	2000	2008	2010	2020	2030
	40,204	40,728	48,611	57,494	66,215	71,274	74,273	78,900	89,100

Source: U.S. Census Bureau

#### Table ED-2

Comparison of Population Change Upstate South Carolina Counties: 2000-2010, 2010-2020 Projections							
County	2000-2010	2010-2020					
	Percent Change	Percent Change					
Oconee	10.1%	5.1%					
Abbeville	03%	-0.12%					
Anderson	11.4%	6.2.%					
Cherokee	5.0%	2.5%					

Greenville	15.8%	8.9%
Greenwood	4.8%	2.5%
Laurens	-4.0%	-2.1%
Pickens	7.1%	3.6%
Spartanburg	10.7%	7.0%
Union	-3.0%	-1.5%
Total South Carolina	13.2%	7.8%

Source: U.S. Census Bureau

Table ED-3 shows that between 2000 and 2010, South Carolina was the tenth fastest growing state in the nation. Oconee County was ranked near the middle of the upstate region, and slightly behind the state as a whole. The 2020 projections suggest a slowing growth trend for upstate counties during that period, but still well ahead of the national average.

It should be noted that changes in population totals are affected by a number of factors, including births, deaths, and migration. As such, Oconee County's growth results from a combination of variables. See Table ED-3 for a comparison of the components of change that impact Oconee and other upstate South Carolina counties.

#### **ED-3**

Comparison of Population Change South Carolina, National and Oconee County								
2000-2010, 2016								
	2000-2010	2010-2016						
	Percent Change							
Oconee County	10.1%	5.1%						
South Carolina	15.3%							
United States	9.7%							

#### **Table ED-**4

Components of Population Change in Upstate South Carolina,										
	2010 Population and 2015 Estimate									
County		Total Change	Number of Births	Number of Deaths	Total Natural Increase (Births - Deaths)	Percent of Total Change Due to Natural Increase (%)	Net Migration	Percent of Total Change Due to Migration (%)		
Oconee	2010	8,721	7,629	5,716	1,913	21.9	6,808	78.1		
oconec	2015	4,538	5,816	4,965	851		3,950			
Abbeville	2010	2,305	3,262	2,349	913	39.6	1,392	60.3		
Abbeville	2015	-710	2,244	1,805	439		-1,025			
Anderson	2010	20,563	20,815	15,173	5,642	27.4	14,921	72.6		
Anderson	2015	14,241	16,231	13,228	3,003		11,965			
Chanakaa	2010	8,031	6,889	4,602	2,287	28.5	5,744	71.5		
Cherokee	2015	1,478	5,130	4,163	967		738			
Courseille	2010	59,489	49,278	29,017	20,261	34.1	39,228	65.9		
Greenville	2015	48,631	40,833	24,502	16,331		34,076			
Comment	2010	6,704	9,158	6,377	2,781	41.5	3,923	58.5		
Greenwood	2015	1,987	6,447	4,991	1,456		840			
T	2010	11,435	8,258	6,660	1,598	14.0	9,837	86.0		
Laurens	2015	29	5,826	5,341	485		-155			
Dialassa	2010	16,861	12,660	8,082	4,578	27.2	12,283	72.8		
Pickens	2015	5,246	9,378	6,687	2,691		3,031			
Concerta 1	2010	26,998	33,040	23,536	9,504	35.2	17,494	64.8		
Spartanburg	2015	21,752	24,996	18,946	6,050		16,859			
	2010	-456	3,897	3,566	331		-787			
Union	2015	-2,111	2,447	2,683	-236		-1,746			

Source: U.S. Census Bureau

As the labor force in this region is somewhat transient, with a number of individuals who reside in a different area than their employment, the Oconee County Economic Development Commission tracks labor statistics from a number of neighboring counties to best determine the level of the available work force. According to the South Carolina Department of Commerce and the Bureau of Labor Statistics, in November of 2016, Oconee County's labor force numbered 35,195, with 1,353 listed as unemployed.

At the time the 2000 Census was taken, approximately 20,500 Oconee County residents worked within their home county's borders, with another 8,900 leaving to work elsewhere. However, at the time of the 2010 Census, that figure had dropped to 12,555. Of this group, 4,230 worked in Greenville County, an increase in percentage from ten years previously, when , adjoining Pickens County drew the largest portion (approximately 4,200). Pickens and Anderson Counties drew 3,993 and 2,605 respectively in 2010.

. Only a little more than 5,000 people from other counties were employed within Oconee County's borders in 2016, nearly the same figure as in 2010. Neighboring Pickens County ranked first, sending Oconee County more than 2,400 of its citizens, , followed next by Anderson County (approximately 2,000,.) and Greenville County (approximately 991. Other counties furnishing significant groups included, Spartanburg and York Counties. ; See Table ED-5 for more detailed information.

		Oconee County Commuting Patterns: Selected Counties					
County	Commu To Oco 2000	nee	Commuting From Oconee 2000	2016	Net Commuting 2016		
Pickens (SC)	2,33	1 2,424	4,192	2,995	-1,861		
Anderson (SC)	1,274	4 2,000	1,770	2,000	-496		
Greenville (SC)	396	991	1,442	3,409	-1,046		
Laurens (SC)	164	113	12		+152		
Spartanburg (SC)	112	399	305	792	-193		
Richland (SC)	107	181	27	760	+80		
Stephens (GA)	144		262	181			
Hart (GA)	93		15				

#### Table ED-5

Source: U.S. Census Bureau and Appalachian Council of Governments, August, 2016

#### **Age Distribution**

One potential key challenge facing future economic development in Oconee County will be maintaining a sufficiently youthful workforce. Oconee County, like many other regions across

the nation, is already beginning to experience the effects of the aging of the "baby boomers", those born immediately following World War II between 1946 and 1964. Unlike most other areas, however, Oconee County has become a lure to a large number of retirees from other regions. As a result, the median age of Oconee's population (the age at which half of the population is older and half is younger) is increasing faster than most areas. The 2000 Census revealed that the median age of the United States rose 2.4 years over the previous decade to 35.3 years of age; during the same period, the median age of Oconee's population rose from 35.6 years in 1990 to 39.5 years in 2000. The median age of County residents has continued to climb in recent years, from 42.6 in 2000 to an estimated 44.3 in 2015, according to the U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates. While the population of the Country continues to feel the impact of added retirees as noted by 2016 estimates. (U.S. Census Bureau) See Table ED-6.

Profile of Age Groups in Oconee County in 2000, 2010 and 2016(Estimate)								
Age Group	2	2000	2	010	Percent	20	)16	Percent
	Number	Percent of Population	Number	Percent of Population	Change 2010	Number	Percent of Population	Change
Under 5	3,996	6.0	4,168	5.6	4	4,144	5.2	1
5-9	4,247	6.4	4,240	5.7	7	4,102	5.5	6
10-14	4,338	6.6	4,498	6.1	5	4,345	5.6	5
15-19	4,090	6.2	4,798	6.5	3-	4,194	5.5	3
20-24	3,752	5.7	4,228	5.6	1	3,877	4.6	2
25-34	8,487	12.8	7,729	10.4	2.4	8,940	6.1	2
35-44	9,625	14.5	8,956	12.1	2.4	9,207	13.0	-1.5
45-54	9,310	14.1	10,635	14.3	.2	9,927	14.0	1
55-59	4,254	6.4	5,327	7.2	.8	4,746	6.7	.3
60-64	3,805	5.7	5,588	7.5	1.8	4,454	6.3	.6
65-74	6,237	9.4	8,447	11.4	2.0	7,225	10.2	.8
75-84	3,225	4.9	4,364	5.9	1.0	4,269	6.0	1.1
85 and over	849	1.3	1,295	1.7	.4	1,323	1.9	.6
Total population	66, 215	100	74,273	100	11.0	75,713	100	1.82

#### Table ED-6

Source: U.S. Census Bureau

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#### **Racial Mix**

Although racial diversity has historically been limited in Oconee County, a slight increase in diversity has occurred in the last twenty five years. In the 2000 Census, 89.1% percent of Oconee County residents were counted in the white racial group, (down from 90.5% in 1990). The 2010 census placed the figure at 89.3%, but the 2015 estimate showed a reduction to 88.2%. That figure remained much higher than the statewide figure of just over 67% according to the 2015 estimate.

Indeed, one of the most noticeable changes among Oconee County's residents is the growth in the number of Hispanics, which by 2000 had come to represent almost 2.5% of the county's total population. (U.S. Census Bureau). In the 2010 American Community Survey by the Census Bureau, the Hispanic population had risen significantly, to 4.4%, and the trend continued with the 2015 estimate of 5.0%.

It should be pointed out that, although there is currently no data available to either confirm or deny the belief, many local officials feel that the Hispanic population was significantly undercounted during the 2000 Census. The actual number, therefore, is likely to be significantly higher than what is reflected in most official documents. And though some non-Hispanics see this growth as a potential problem, many in Oconee County's manufacturing community see the influx of Hispanic workers to be a positive factor. In spite of many being limited in formal education and advanced technical training, the Hispanic employee is generally regarded as being bright, hard working, and conscientious; getting to work everyday on time is extremely important to most. Of course, there are some real challenges facing this group, not the least of which is a widespread weakness in comprehension of the English language, and the well- known problem of obtaining legal documentation to obtain work. Still, there is no question this group will continue to increase in number in coming years, likely becoming a very important portion of Oconee County's work force.

See Table ED-7 for a more detailed breakdown of Oconee County's racial composition.

Table I	E <b>D-7</b>
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				Ra	ice				
				One Race					
	Total Population	Total (One Race)	White	Black or African American	Am. Indian & Alaska Native	Asian	Native Hawaiian & Other Pacific Islander	Two or More Races	Hispanic or Latino (of any race)
2000 Estimate Base	66,215	65,793	59,796	5,577	159	247	14	422	1,562
2010	74,273	73,098	65,177	5,613	176	436	10	1,175	3,349
2015 Estimates Population Growth 2000-2015	75,713	73,741	67,659	5,926	245	662	20	1,201	3,802

Source: U.S. Census Bureau

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#### Education

Education level is one of the most important factors in measuring the potential of any work force. In the past, given that Oconee County's work force was primarily employed in textiles and agricultural pursuits, technical demands were relatively low. Today, however, employers must hire individuals possessing the academic skills that will enable them to complete a broad spectrum of technical training. Therefore, as the region continues to attract more and more hightech industries, it will be critical to upgrade the overall education level of Oconee County's work force.

According to information from the South Carolina Office of Research and Statistics, in 2000, over 11% of Oconee County adults older than 25 years of age had less than a 9<sup>th</sup> grade education. In addition, another 15% of this age group had attended high school but failed to attain a diploma. Of the rest of those 25 years of age and up, 16.2% had some college; 6.3% had an Associate's Degree; 11.0% had a Bachelor's Degree; and 7.1% had a graduate or professional degree.

Table ED-8 compares Oconee County's high school attendance (2007-2008 school year) with other upstate South Carolina counties.

SCHOOL DISTRICT PROFILES, 2015									
Upstate School Districts									
SCHOOL DISTRICT	ENROLLMENT	ENROLLMENT ATTENDANCE RATE (%)		GRADUATION RATE (%)	DROPOUT RATE (%)				
Abbeville	3,065	95.6%	80.9%	86.8%	2.8%				
Anderson 1	9,631	95.2%	84.8%	91.4%	.6%				
Anderson 2	3,819	96.3%	82.0%	84.3%	2.2%				
Anderson 3	2,638	94.6%	79.1%	87.0%	.1%				
Anderson 4	2,909	95.2%	83.5%	86.4%	2.5%				
Anderson 5	12,767	95.4%	78.9%	79.7%	3.7%				
Cherokee	9,104	94.8%	66.5%	81.9%	4.9%				
Greenville	75,508	95.6%	83.1%	83.1%	2.8%				
Greenwood 50	9,076	94.9%	62.8%	77.6%	1.5%				
Greenwood 51	984	94.8%	71.6%	78.4%	3.9%				
Greenwood 52	1,717	94.9%	75.4%	86.1%	2.8%				
Laurens 55	6,082	95.1%	72.9%	80.5%	3.0%				

#### Table ED-8

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Laurens 56	3,136	97.6%	77.4%	77.9%	2.4%
Oconee	10,550	96.2%	78.5%	82.2%	2.7%
Pickens	16,619	95.1%	79.6%	82.9%	3.6%
Spartanburg 1	5,102	96.3%	87.4%	86.1%	1.5%
Spartanburg 2	10098	95.6%	84.8%	84.0%	1.7%
Spartanburg 3	2,977	95.0%	80.3%	81.0%	2.0%
Spartanburg 4	2,749	97.6%	81.8%	82.2%	1.0%
Spartanburg 5	8.074	96.6%	85.9%	85.6%	1.6%
Spartanburg 6	11,147	95.6%	74.8%	85.5%	2.0%
Spartanburg 7	7,142	94.2%	75.7%	82.8%	2.0%
Union	4,160	94.3%	63.5%	80.7%	3.7%

Source: 2008 Annual District Report Cards; South Carolina Department of Education

Although Oconee County must continue to work hard to improve some aspects of educating its work force, there are bright spots. One of these can be found in Average Scholastic Assessment Test (SAT) scores, a key measure used by colleges and universities in their admissions process. Oconee County students typically rank high in the state, establishing the School District of Oconee County as one of the leading public school districts in the region. Table ED-9 compares Oconee County SAT scores with both state and national results from 2008.

#### Table ED-9

Average Scholastic Assessment Test (SAT) Results: 2015					
	WritingVerbalMathComposite				
Oconee County	482	508	508	1,498	
South Carolina	465	488	487	1,442	
National	484	495	511	1490	

Source: School District of Oconee County

#### **Personal Income**

Oconee County's per capita personal income typically ranks among the highest in upstate South Carolina, in 2008 reaching \$31,675. This figure reflects an increase of 13.6% since 2000, and is second only in the upstate region to Greenville County. Table ED-10 compares 2008 per capita personal income levels throughout upstate South Carolina.

#### Table ED-10

	Per Ca	Per Capita Personal Income in Selected Upstate South Carolina Counties: 2008, 2014		
Coun	County Amount (in dollars) 2008		2014	Rank

0	04.655	25.504	
Oconee	31,675	35,794	3
Abbeville	23,829	29,570	7
Anderson	29,084	34,228	4
Cherokee	24,794	28,230	9
Greenville	35,076	40,791	1
Greenwood	27,297		5
Laurens	26,237		7
Pickens	26,624		6
Spartanburg	28,971		2
Union	26,230		8

Source: South Carolina Department of Revenue

**Union Membership-** In 2009 there did not appear to be any unionized industrial operations in Oconee County.

### **Major Employment Sectors**

#### Manufacturing

Oconee County is recognized as one of the six Upstate counties that comprise South Carolina's most progressive industrialized region. In 2008, this area announced capital investments of approximately \$720 million, amounting to 17.8 percent of the state total. Also, during this same period the six-county region announced the creation of more than ¼ of the state's new jobs.

Table ED-11 illustrates the amount of capital investment reported in Oconee County between 2000 and 2015.

#### Table ED-11

Capital Investment in Oconee County: 2000- 2015		
Year	<b>Dollars Invested (Millions)</b>	
2000	24.0	
2001	26.9	
2002	28.0	
2003	37.8	
2004	63.1	
2005	44.0	
2006	19.2	

2007	72.9
2008	67.5
2009	18
2010	28
2011	66.7
2012	32
2013	37.1
2014	45.0
2015	53.4

Source: Appalachian Council of Governments

According to information from the Oconee County Economic Development Commission, 2007-2008 saw a substantial increase in announced capital investment to more than \$140 million. A significant drop off occurred following the recession that began with the market collapse of 2008, but capital investment rebounded remarkably between 2012 and 2016, with a total investment for the 2014-15 period of \$98.4 million. According to a report from Impact DataSource, between 2012 and the end of 2016, 25 economic development projects have resulted in \$279 million in new capital investments and more than 1,100 new jobs. The infusion of new jobs has grown the Oconee County workforce to 33,842, a record setting figure.

These numbers do not take into account the indirect spin-off impact created by these large capital investment projects. The Impact Datasource report also finds that an additional 483 jobs have resulted or will occur, raising the total job figure to 1,589, providing almost \$46 million in wages to Oconee County families.

In addition, the projects generated \$72.9 million in construction spending and created 769 construction jobs.

Oconee County is centrally located between Atlanta and Charlotte on South Carolina's I-85 corridor, a fact that has proven to be one of the county's greatest assets in both recruiting new industry, and strengthening an increasingly diverse business base. Having already attracted corporate headquarters, high-tech manufacturers, and automobile-related suppliers, Oconee County's leaders strive to maintain a pro-business attitude that insures businesses can compete and thrive.

In past decades, Oconee County has at times sought its own path in creating a track record of successful economic development. Recent economic and political changes, however, have necessitated the county seek partners in maintaining its growing prosperity; in today's economy,

many challenges can only be overcome by taking a regional approach. Therefore, Oconee County has joined the Upstate Alliance, a 10-county partnership of community leaders, economic developers, and private companies. Working together, these various individuals and entities are committed to promoting economic development and to solving common problems across the entire region.

The potential benefits of taking a regional approach to economic development were evidenced early on when, in September 2003, the Upstate Alliance helped bring about one of the most significant economic development announcements in the history of South Carolina, Clemson University's International Center for Automotive Research (ICAR). Though it will take years to bring to fruition, this joint venture between the university and BMW Automotive is expected to lure a wide range of automobile-related businesses into the region, placing the Upstate firmly at the forefront of automotive research. As such, the investment brought into the region by the facility is destined to positively impact the economic makeup of not only Oconee County and its Upstate Alliance partners, but the rest of the state as well.

#### Tourism

A new tourism development plan for Oconee County was completed in 2015 and adopted by County Council as well as the City Councils of Walhalla, Seneca and Westminster. Entitled *Destination Oconee: Realizing the Future of Oconee County*, the plan outlines recommendations for tourism, growth policies, branding, and marketing for the area.

*Destination Oconee* was completed by the South Carolina National Heritage Corridor (SCNHC) through its SC Great Outdoors (SCGO) initiative. Implementation of the plan should lead to positive economic changes in Oconee County's future. The initiative comes at a time when the tourism industry is growing at historic rates in the region. Tourism expenditures in Oconee County reached a record level of \$58.4 million in 2015, which amounted to a 34% increase in annual tourism spending since 2006. Businesses in the County collected \$6.74 million in local and state taxes during that period. As a result, the local tax burden for every Oconee County household was reduced by \$172 per year.

One important program to emerge from the recognition of tourism as a vital element of the regional economy, including Oconee County, is the planned extension of the Palmetto Trail from its present terminus at Oconee Station into downtown Walhalla. The extension into Walhalla will add about 16 miles to the mountain end of the Trail providing both biking and hiking opportunities. The trail projects also include parking improvements and a mountain biking section around Stumphouse Tunnel.

Based on reports provided by SC Parks, Recreation & Tourism (SCPRT), the tourism industry is the second largest employer in the state. In Oconee County, there are over 1,800 people employed in the tourism industry with more than \$20,000,000 in payroll. Among the revenues received through tourism-related activities are retail sales taxes, accommodations taxes, excise

taxes, admissions taxes, income taxes, local option sales taxes, hospitality taxes, property taxes, and business license fees. .

In 2007, the state contracted the consulting services of the McNulty Group to research and develop a comprehensive tourism plan for each region of the state. Oconee County is bundled in the same region as Greenville, Anderson, Pickens, Spartanburg and Cherokee counties. The first draft of this study places significant emphasis on the natural resources of Oconee County. In fact, both the Greenville and Anderson CVBs have a picture of an Oconee County waterfall on the cover of their visitors guides. Additionally, both of our neighboring CVBs promote our area to their tourists.

As a result of the growing tourism market in Oconee County, a new Convention & Visitors Bureau was established in September of 2008. The Mountain Lakes CVB is solely funded by local and state accommodations taxes which means that the primary objective and focus of the CVB is to put "heads in beds". It has been statistically proven by the Smith Travel Industry that on average, every tourist that stays overnight will spend \$120 in addition to the cost of the room. So for every 100 room nights sold, the additional economic impact to the county will be \$12,000.

Using existing data and statistics as provided by the SCPRT, it is quite clear that tourism is rapidly becoming, a leading industry in Oconee County.

Accommodations Tax Collections by Fiscal Year* 2007, 2011, 2013, 2015				
County/ MSA / ACOG Region/ Upstate Region / State				
COUNTY	FISCAL YEAR	FISCAL YEAR	FISCAL YEAR	FISCAL YEAR
	2006-07	2010-11	2012-13	2014-15
Oconee	128,996	110,291	181,209	224,757

#### Table ED-12

Source: SC Department of Revenue

\* The fiscal year covers a the period beginning July 1 and ending June 30

As table ED-12 shows, Oconee County's accommodations taxes increased by more than 19% during the time period between 2013 and 2015, a figure much higher than the statewide average during that period.

#### Agriculture

As in so many other areas of the South, Oconee County's economic history is closely tied to agriculture. In recent decades, however, the area's economy has become much more diverse, with today only a small percentage of area residents relying on farming for their primary source of income. Still, in spite of the fact that many have abandoned agriculture for other pursuits, the overall amount of income generated by farming-related activities in Oconee County remains significant. Table ED-13 shows information regarding farms and farm size in Oconee County.

Table ED-13

Farm Data		
2012		
Number of Farms	884	
Land in Farms	67,871 acres	
Avg. Size of Farm	77 acres	

Source: Clemson University Agriculture Extension

In 2002 () Oconee County was home to 878 farms, totaling 78,349 acres of land. This equates to an average farm size of approximately 89 acres. Ten years later, in 2012, the number and size of farms had declined slightly, evidence that the County's economic base continues to move away from agricultural production in favor of manufacturing and tourism. The vast majority of Oconee County's agricultural production is focused on livestock (which includes poultry), with field crops accounting for only 5% of the total yield. Table ED-14 illustrates the proportion of agricultural sales in Oconee County for 2007.

#### Table ED-14

Agricultural Sales in Oconee County: 2007 and 2012				
	2007 Dollars	Rank in State	2012 Dollars	Rank in State
Crops	6,081,000	36	6,081,000	35
Livestock	77,812,000	4	115,305,000	4
Total	82,021,000	5	121,385,000	10

Source: Clemson University Agriculture Extension

It is commonly known that Oconee County's poultry industry ranks near the top of the state. Table ED-15 compares the county's 2005 production in livestock and livestock products, egg production and broilers. NOTE: this area needs review/rewording.

#### Table ED-15

Livestock Production/Sales in Oconee County: 2012		
Reported Livestock and Livestock Products	Number	
Cattle and Calves	12,404	
Egg Production	24,101	
Broilers	31,431,304	

Source: Clemson University Agriculture Extension

Table ED-16 lists Oconee County's major cash crops, acres harvested in 2012, yield per acre, total reported production, and the county's ranking within South Carolina.

#### Table ED-16

Major Oconee County Crops: 2012				
Сгор	Acres Harvested	Reported Yield per Acre	Total Production	Rank
Corn for Grain	595	93 bushels	55,464 bushels	32
Нау	9,419	1.6tons	15,000 tons	14
Soybeans	1612	41 bushels	66,831 bushels	30
Winter Wheat	1000	37 bushels	37,418 bushels	31
Apples	No longer reported			

Source: Clemson University Agriculture Extension

Perhaps no other crop is more associated with Oconee County than apples, traditionally a major cash crop grown primarily in the county's western foothills. In recent years, however, pressure from imports, rising production costs, and losses from various weather-related events have led many Oconee County producers to curtail or abandon the crop. Still, Oconee County remains ranked near the top of apple-producing counties in South Carolina.

#### Timber

Oconee County's abundant forestlands have served as a source of wealth for a large number of local residents throughout the county's history. And though, as with agriculture, the proportion of Oconeeans who make their living in forestry has diminished in recent decades, the industry continues to bring considerable revenue into the area. See Table ED-15 for more information.

2015 Oconee County Timber Harvests			
Stumpage Value Paid to All Owners	Delivered Value of Timber	Local Value to Harvest and Transport	
\$6,376,326			

Source: Clemson University Agriculture Extension

#### Infrastructure

The development and expansion of infrastructure may very well prove to be one of the greatest challenges to future economic development in Oconee County. Regardless of the difficulty, however, such issues must be dealt with, for without sufficient roads, water, sewer treatment, and other critical infrastructure items, modern businesses cannot survive. And, as operations looking to locate or expand in an area need to be functioning as soon as possible, having immediate access to pre-existing infrastructure is vital. For example, it is unlikely that any major project offering to bring needed jobs into a community will be willing to delay months for the installation of a water line or sewer line, especially as other areas offer everything needed for immediate connection. Therefore, in today's economy, time is an expensive commodity, with successful economic development hinging on planning for future development and having critical infrastructure in place, ready to serve businesses when they need it.

#### **Master Plan**

Oconee County completed an Infrastructure Master Plan in 2004 that charts a course to greater economic prosperity in coming years. Drafted by Goldie & Associates under the direction of County Council, the plan provides various proposals for developing key growth regions of the county. Chief among these areas is the I-85 corridor in southern Oconee County, an area that, with the proper planning and investment by the local government, will provide tremendous benefits to the entire county. With the installation of adequate wastewater treatment capacity and water supplies, the area is expected to become home to a number of industrial and business operations, enhancing the county's tax base and providing high-quality employment opportunities for generations to come.

#### **Industrial Parks**

The identification of prime industrial property is a vital component of planning for future economic development. Until it is known what areas have the greatest potential for meeting the needs of businesses, crucial infrastructure cannot be put in place to attract investors. And given that most businesses scouting for potential locations are looking for sites that offer quick start-up times, the best tool for attracting new investment is an industrial park. To date, Oconee County

has developed only one such property, the Oconee County Commerce Center, located near the intersection of Highways S.C. 11 and U.S. 123. Although a relatively small project, the short time spent in developing it greatly expanded the county's attractiveness to potential investors. Also, the Commerce Center provided county leaders invaluable experience, for future parks in areas like the I-85 corridor (ideally much larger projects that encompass from 250-500 acres) will be a key part of developing Oconee County's full economic potential. The cost of not having sufficient infrastructure serving prime industrial properties can be easily seen in lost opportunities. According to the Oconee County Economic Development Commission, in fiscal year 2003-2004 alone, Oconee County was unable to compete for three major businesses looking to locate in the region due to insufficient water supply and sewer treatment in the I-85 area. In total, these projects offered over \$440 million in investment, and would have created approximately 1,100 jobs.

#### Airport

The Oconee County Airport, owned and operated by the county, is a tremendous asset in both serving existing businesses, and recruiting new investment dollars. In fact, a series of upgrades in recent years has placed it into the top ranks of similar operations in the region. Still, efforts are currently underway to further expand on this success, including expanding the runway to 5,000 feet to accommodate larger business jets, a modern aircraft instrument landing system, and additional hanger space. These improvements are expected to produce a number of results, including the possible development of a nearby world-class business park, and joint ventures between the county and nearby Clemson University.

#### Water

Oconee County's future success in economic development is directly tied to the guarantee of an adequate water supply. Currently, there are 5 major water suppliers in Oconee County, including the municipalities of Salem, Seneca, Walhalla, Westminster; and the Pioneer Rural Water District. In addition, there are a number of smaller suppliers that primarily serve individual communities scattered across the county. Still, a number of areas in Oconee County remain reliant on personal wells, which greatly restricts the number of suitable areas for industrial development. Therefore, expansion of a properly planned water supply system is a issue in planning for future economic development.

#### Sewer System

Oconee Joint Regional Sewer Authority's existing wastewater collection, transportation, and treatment system is primarily focused on serving the areas in and near the towns of Seneca, Walhalla, and Westminster. Although the I-85 area of southern Oconee County, which has a number of sites with easy access to the transportation artery, lacks access to a sewer system. However, an expansions currently underway that will provide sewer service to areas in the southern part of the county near Fair Play.

Other areas, as well, are similarly restrict Therefore, the availability of wastewater facilities one of the main priorities in Oconee County's near-term economic development efforts

#### Transportation

As Oconee County's road system has long been able to provide easy access to most areas of the county, the main focus of local roadwork is on maintenance of the existing routes. Given the current rate of population growth and development, however, this will likely have to change in the near future, for main thoroughfares are already becoming seriously overtaxed during peak periods. Such is the case of the U.S. 76/123 corridor, which in recent years has become the primary transportation artery for a large portion of the area's development. Other areas, as well, are either currently experiencing the side effects of development, or will soon be. Among these are:

S.C. 183- from Walhalla to the S.C. 130 intersection U.S. 76- from Westminster to the Georgia state line Sheep Farm Road- from U.S. 76/123 to S.C. 28 S.C. 130- from S.C. 28/U.S. 76/123 to S.C. 183 S.C. 28- from Walhalla north to the Georgia state line Old Clemson Highway- from U.S. 76/123 to S.C. 130

Of course, it should be noted that many of the roads are owned and maintained by the State of South Carolina, leaving Oconee County with only limited input in the way that they improved. Still, counties are able to influence the state's prioritization of projects, particularly if such projects impact adopted development plans. Therefore, though the state may have the final say in the manner in which the construction and maintenance of its roads, plans for expanding Oconee County's economic prosperity should include consideration of all road-related issues.

#### Solid Waste

Oconee County currently lacks a municipal landfill to handle the solid waste produced within the county; instead, it is disposed of in a Homer, Georgia facility, a fact that worries a number of county leaders. However, the county does have a current construction and demolition landfill with an expected life of 20-25 years with an additional area to expand on an older landfill that could add an estimated 10 more years of life. As the cost of transporting the waste out of the county will certainly rise in coming years, dealing with solid waste is likely to be a growing challenge to future economic development. Still, as state rules prevent the establishment of a new landfill within the county, there are currently few options. However, given that disposal of solid waste is the subject of much research across the world, the future is likely to bring a number of new technologies that will not only enable Oconee County to dispose of its own solid waste, but also possibly even profit from it. For now, however, it is an issue that must not be forgotten when planning for Oconee County's future.

## Analysis

As the preceding paragraphs have shown, Oconee County possesses the necessary assets to insure a very prosperous economic future. Its workforce has proven itself to be bright, hardworking, and able to meet the requirements of a wide variety of businesses; any existing or developing industry should have little difficulty in meeting its labor needs in the county. And, with the support of the region's world-class educational and technical training system, virtually any type of operation should be able to choose from an large pool of well-qualified trainable employees. Already, the county is home to a diversified business base, evidencing the presence of a supportive environment for operations looking to locate in the region. There is little doubt, therefore, that Oconee County has many of the basic tools in place to insure its future economic prosperity. Still, there are some challenges that will have to be overcome before the county's economic potential can be achieved.

There is no doubt that the effort to expand and develop the infrastructure necessary to insure continued prosperity in Oconee County will require a tremendous effort. And, given existing political realities, this will only be accomplished with the cooperation of a number of entities; chief among these, of course, are the area municipalities. Too often in the past, it appears infrastructure projects have been isolated efforts, typically a single party upgrading their individual system with limited thought given to the impact on the rest of the county. Such attitudes, however, must become a thing of the past if the county is to succeed in an everchanging modern economy. Today, the cost of development necessitates the sharing of burdens whenever possible, in the end not only both reducing redundancy of effort and the price paid by individual partners, but also magnifying the end results far beyond what could have been achieved singly. It is imperative, therefore, for all Oconee County governmental entities to look beyond their own immediate interests and cooperate with others around them.

Of all of the potential challenges to Oconee County's future economic prosperity, perhaps the greatest will prove to be the ability of its leaders to identify, evaluate, and plan for every eventuality that may impact the growth or decay of the county. Such planning should guide all aspects of economic development- land use, infrastructure, labor force, relationships with municipalities and other governmental entities. Perhaps most critically, adopted plans should be adhered to, even when faced with options that may seem to be more politically expedient. The establishment and maintenance of a successful economic development program involves focusing the efforts of all aspects of county government on the goal; and as such, each action taken by local leaders impacts the progress made, either positively or negatively. There are no isolated decisions. Yet, with the proper commitment in place, all other hurdles become much smaller obstacles. The power to insure Oconee County's future success in economic development therefore lies within its grasp- provided sufficient focus and back-bone is found to do the job.

## **Economic Development Objectives for the Future**

- 1. Complete and adopt the Infrastructure Master Plan currently being developed by County Council.
  - Completed but never adopted.
- 2. Identify, secure and develop additional property for county-owned industrial park(s) in prime industrial areas.
  - The second park area was identified and purchased. The Golden Corner Commerce Park is a SC Certified Industrial Site and a waste water treatment facility is in the permitting stage; assuming approval of the plant, in mid-2009 the construction could be completed by late 2010.
- **3.** Continue upgrades to the Oconee County Airport, including expansion of the runway length to 5000 feet, installation of modern aircraft instrument landing system, and construction of additional hanger space.

Strategies	Timeframe
Complete Expansion of Runway Length to 5000 ft	2010
Install Modern Instrument Landing System	2011
Construct Additional Hanger Space as Needed	Ongoing
Utilize Capital Improvements Plan to Continue to Upgrade Facility as Allowed by FAA, SC and County Budgets	Ongoing

- 4. Improve communication and cooperation between county government and local municipalities; work to develop coordinated 5 and 10-Year capital improvement plans.
- 5. Work to guarantee adequate water treatment and distribution systems for present and future economic development in Oconee County. This effort may include:
  - Creating a partnership with the municipal water providers and the Pioneer Rural Water District to develop a mechanism that would allow the extension of services into unincorporated areas of the county and the collection of water revenues from the users in these areas.
  - Coordinating efforts to extend water service to the I-85 corridor to increase economic development potential for the corridor and the total county.
  - Planning for the extension of water services to additional areas of the county, such as the US Highway 123 and SC Highway 28 corridors.

- Identification and establishment of revenue sources such as special tax districts and local option sales taxes to fund water system extension .
- Request municipalities inventory the current conditions of their water infrastructure systems to accommodate residential, commercial and industrial growth and offer solutions to correct challenges as well as define future needs.
- Encourage water providers to coordinate their efforts with other utility providers in planning for future growth for Oconee County.
- 6. Improve and expand wastewater treatment within the county. This effort may include:

Strategy	Timeframe
Establishing partnership(s) with the municipal sewer system providers and the Oconee Joint Regional Sewer Authority to develop a plan to extend service into unincorporated areas of the county.	2009
Establishing partnership(s) with the Oconee Joint Regional Sewer Authority and the municipal sewer providers to coordinate efforts to provide sewer to the I-85 corridor within 10 years; included in this effort will be the construction of a wastewater treatment facility capable of expansion to serve both present and future needs of the surrounding region, including the South Carolina Welcome Center area, Oconee County Exits 1-4, and areas in Anderson County that may be the focus of projects developed jointly by Oconee and Anderson Counties.	2009
Planning the extension of sewer service to additional areas of the Highways U.S. 123, SC 28, and the Oconee County Airport to encourage development of these areas.	2009
Establishing partnership(s) with local, regional, state, and federal agencies to find funding sources for wastewater treatment needs. This effort may include the establishment of revenue sources such as special tax districts and local option sales taxes.	Ongoing

7. Work to establish plans to meet the transportation needs of Oconee County for the next 30 Years.

Strategies	Timeframe
These plans should re-inventory all roads and bridges in the county;	2010
Identify potential high-growth areas and the best approach to serving them;	Ongoing
Examine the possibility of a southern bypass of Seneca; from SC Hwy 59 to SC Hwy 123 on the eastern side of Seneca.	2012
Develop methods of encouraging more travel through Oconee County on the route from Atlanta, Ga. to Ashville, N.C.	Ongoing

8. Upgrade solid waste services in key industrial areas of Oconee County. This effort may include working to establish a future regional landfill; the development of a

solid waste research facility at a regional landfill; and identifying and constructing additional construction and demolition landfill sites within the county.

- 9. Work to develop a planning process focused on establishing an efficient, equitable, and mutually compatible distribution of land uses that supports economic development while providing for future changes. This efforts may include:
  - Continued support of a comprehensive planning process that accurately inventories and analyzes existing county conditions.
  - Establishment of a countywide zoning process that includes public education and opportunities for a wide range of public input.

#### **10. Expand efforts to increase tourism revenues. This effort may include:**

Strategies	Time Frame
• Working with state and federal agencies to access additional grant funding as available.	Ongoing
• Developing and hosting regionally and nationally promoted sporting and recreational events.	2010-12
• Develop and support local festivals, entertainment events, and other activities that attract tourists to the county.	Ongoing
• Development of the Southern Appalachian Farmstead Project	Approval in process

**11.** Work to renew and expand local agribusiness opportunities. These efforts may include:

- Working with state and federal agencies to attract agribusiness-related grants and other revenue sources.
- Supporting efforts to establish pilot-programs related to new agricultural methods, technologies, and products.
- Providing appropriate assistance to efforts to expand non-traditional and specialty agribusiness opportunities.



### Introduction

This element focuses on the way land is used in Oconee County, and seeks to establish the direction that citizen's desire their community to grow, as well as identify the various tools deemed appropriate to guide this growth. Additionally, it examines existing usage by category, such as residential, commercial, industrial, etc., and attempts to anticipate the relative amount of land needed to accommodate future changes. The way land is utilized in a community impacts most aspects of our lives, therefore, the other elements of this Comprehensive Plan were a major consideration throughout the creation of this element.

### Background

Land use in the Oconee County area has for centuries primarily been, in one way or another, focused on using the region's abundant natural resources. Situated at the edge of the Blue Ridge Mountains, the County is blessed with three distinct physiographic zones that traditionally offered a variety of opportunities for sustenance and economic gain. As a result, for centuries Oconee County's lands have supported mining, timbering, farming, and similar operations dependent on direct utilization of resources, supported by those tradesmen and merchants necessary to sustain them. Over time, communities and towns grew and prospered, developing the typical mix of service and trade activities found throughout much of the South, but the main focus of land use remained tied to our natural resources. Even the development of the textile industry beginning in the late 19<sup>th</sup> Century, which provided a major economic boost to the county, impacted land use only in limited areas, primarily in and around some of the towns. Therefore, Oconee County's historic land use patterns have been tied directly to its natural resources. In the last several decades, however, there has been a significant shift in this traditional pattern.

There are a number of factors to consider in evaluating the changes in land use patterns in Oconee County. Agriculture, for example, though still a significant part of the region's economic vitality, has a reduced land area footprint in recent years. . Therefore, the amount of land previously devoted to farm related activities has, in recent years, become available for other uses. Oconee County experienced a significant increase in population between 1980 and 2010. While the rate of growth slowed between 2010 and 2016, new residents continued to arrive. The demand for housing in some market sectors has also continued to grow. Higher end single family development remains a strong component of land use, with much of that focus on lakefront communities on the eastern side of the County. In addition, a boom is underway in student housing development, due primarily to growth in Clemson University's student population and its renewed prominence at the national level. The Clemson Academic Village project, located near Lake Hartwell west of Clemson will feature more than 900 beds. The Pier, another major development begun several years ago, features apartments, cottages and tiny homes.

Traditional ways of land use, and those lifestyles associated with them, are going to be subjected to increasing pressure to conform to the same growing urbanization seen throughout our region. With this in mind, the goals expressed in this element will attempt to set the stage for identifying those critical challenges, and provide avenues for managing the outcomes. The decisions we make, and the successes or failures we may have in implementing the goals, will impact the lives of generations of Oconeeans in the future.

### **Existing Conditions**

The boundaries of Oconee County encompass a total area of approximately 428,800 acres, or roughly 670 square miles. Of this, the Oconee County Geographic Information System shows almost 600 square miles are land (587 square miles in the unincorporated areas), with the balance covered by lake surface. It should be noted that, due to large federal and state property holdings (including Sumter National Forest and Clemson University), approximately 25% of the county is preserved as forest lands.

In 2008, Oconee County worked with a consultant to obtain current land use data to use as a tool for planning. As this was the first such attempt to identify usage on a countywide parcel level, it was intended to serve as a good baseline for measuring change in the future. A series of land use categories intended to delineate all of the more typical uses were defined by county staff prior to the project, and Kucera International, Inc., a world-wide geographic information consultant, reviewed each parcel and made determinations of land use based on obvious predominant utilization of the parcel. Among the information used to make the determinations included 2005 orthophotography of the county, and information from tax records. In some cases, the consultant was unable to make a reasonable determination, and the parcel's use was classed as 'Not Apparent'. For these, planning staff conducted a more detailed investigation, and in a number of instances performed site inspections to make a determination. Upon completion of the consultant's work, staff conducted a comprehensive review of the delivered information to identify any remaining errors and inconsistencies.

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Following completion of the review, a series of Planning District land use maps were created. These maps were presented at a series of community meetings, with local maps highlighted at each session. Staff encouraged citizens to study the maps, paying particular attention to those parcels in and around their community. To further facilitate the review, copies were made available on the internet, along with e-mail capable comment forms. At the end of 6 meetings conducted over several months in various areas of the county, only 4 errors were identified by the public, indicating that the overall accuracy of the data was extremely high.

It should be stressed that determinations of use were made based on the predominant obvious utilization of each parcel, which in some cases required subjective determinations. This made the public review and comment opportunities all the more critical. In a few situations, the amount of information available was insufficient to make a determination with confidence; however, such cases were few. Typically, the use was apparent, or in the case of mixed uses, one was clearly more significant. For example, large timbered parcels containing relatively small fields were designated Forest (Private). In other cases where the mix of uses appeared to be equally significant, such as would be the case for parcels utilized for both home and business, they were considered Multi Use. It is understood that, as with any task dealing with so many parcels, some errors were made in evaluating the information available. For the purposes of the project, however, based on the feedback from the public reviews, the overall trends shown are accurate.

The current land and future land use maps contained in this document have not been updated from the 2010 plan. This will be done at a detailed level when the Comprehensive Plan is updated fully in 2020. The SC Comprehensive Planning Enabling Act of 1994 requires a complete update at least every 10 years. However, Table LU-A and Map LU-A indicate the major commercial, residential and industrial projects that have been approved or begun since 2010. Many of the subdivisions shown are not fully built out, but they are platted for development.

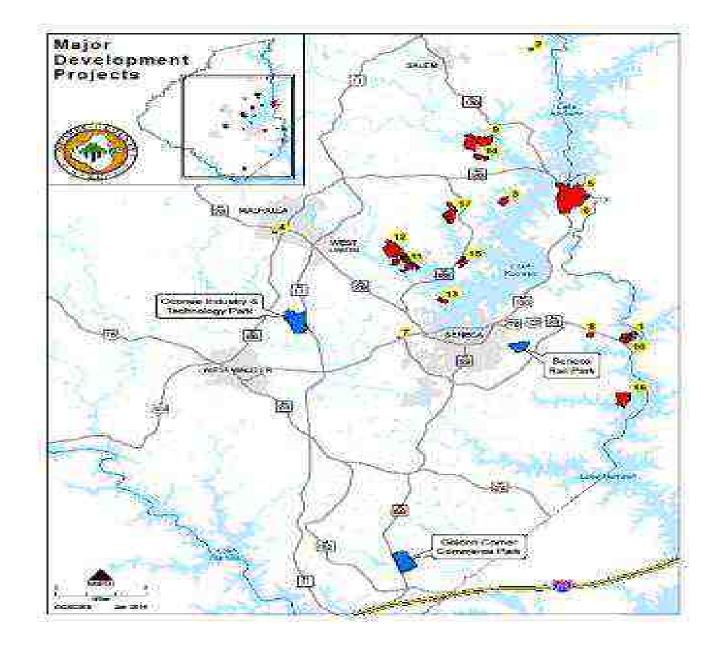
Table LU-AMajor Oconee County Projects 2010 - 2017

Мар		Development type	
Numbers			
ID 1	Clemson Academic Campus		
		Student Housing Campus	
See Map	<b>Oconee Industry and</b>	Manufacturing and Training/technology	
	Technology Park		
See Map	Golden Corner Commerce Park	Manufacturing/warehouse/distribution	
See Map	Seneca Rail Park	Manufacturing	
2	Cliffs Wellness Center	Residential amenity	
3	Cottages at Riverbirch	Residential	
4	Detention Center	Public Facility	
5	Duke Flex Building	Utility	
6	Duke Office	Utility	
7	Goodwill	Non profit	
8	Greenfield HQ	Industrial HQ	
9	Harbor Point	Single Family	
10	Hartwell Village	Commercial	
11	Peninsula Pointe	Residential	
12	Peninsula Pointe North		

13	Retreat at Harbor Ridge	Residential
14	Sweetwater 2016	Residential
15	The Oaks	Residential
16	The Pier	Student housing/ cottages, tiny homes, apartments
17	Timber Bay	Residential

Map LU-A Major Oconee County Projects 2010 - 2017

2010 Comprehensive Plan REVISED JANUARY 2018



The data from the 2010 Comprehensive Plan divided current land use into the following categories:

- ✤ Residential Single Family
- Residential Multi-family
- Condo
- Commercial-Service

2010 Comprehensive Plan REVISED JANUARY 2018

- ✤ Commercial-Industrial
- Transportation, Communications, and Utilities
- ✤ Agriculture
- Extraction
- ✤ Recreation
- ✤ Forest
- ✤ National and State Forest
- Multi-Use
- Undeveloped
- Not Apparent

Table LU-1 shows the distribution of the various land uses across the county as measured in the GIS:

Table LU-1

Current Land Use in Unincorporated Oconee County: 2008				
USE	Total Acreage	Number of Parcels	Percent of Total Acreage	Rank of Use
Residential Single Family	66,502	37,097	17.67	4
Residential Multi-Family	235.65	101	.06	11
Condo	133.45	745	.04	12
Commercial-Service	2,032	647	.54	8
Commercial-Industrial	1,791.83	118	.48	9
Transport., Communications, and Utilities	3,964.83	200	1.05	6
Agriculture	89,214.46	2,720	23.71	3
Extraction	82.2	4	.02	13
Recreation	5,055.14	909	1.34	5
Forest (Private)	109,600.17	3,060	29.13	1
National and State Forest	89,248.75	38	23.72	2
Multi Use	1,204.01	98	.32	10

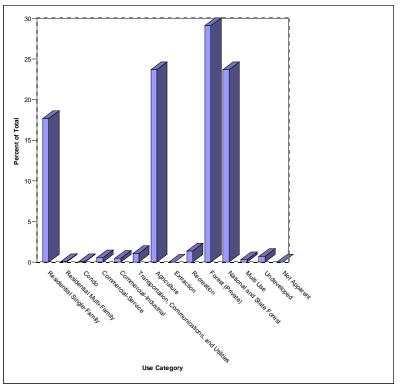
Undeveloped	2,718.11	570	.72	7
Not Apparent	54.19	71	.01	14

Source: Oconee County Planning Department

Note on Measured Acreage shown in Table LU-1: Although it not very common today with modern surveying equipment and methods, it was not unusual in the past for parcels to be recorded as acreage 'more or less'. For example, a parcel recorded as containing '60 acres more or less' may in reality contain 63 acres- or perhaps less than 60 acres- but totals based on tax rolls typically only reflect the 60 acres. The Geographic Information System (GIS), however, bases area on digitized coordinates that establish property boundaries, resulting in much greater accuracy. Therefore, it should be expected to find at least some variation between totals on the tax rolls and in the GIS.

The chart below is a graphic representation of the percentages of the various current land uses shown in Table LU-1:



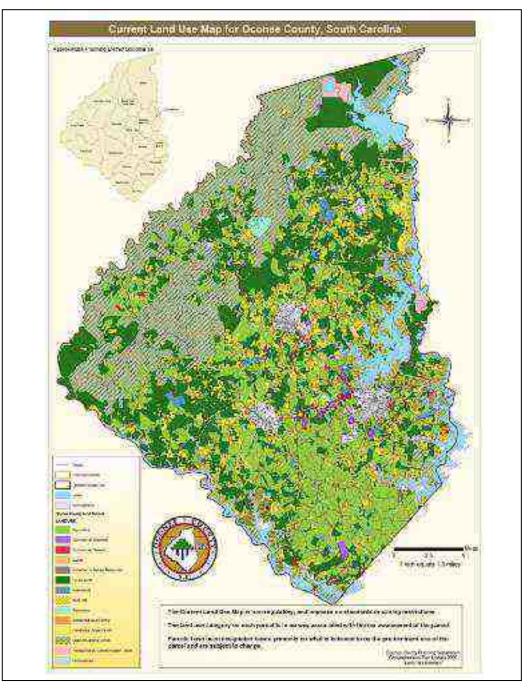


Source: Oconee County Planning Department and Tax Assessor

Not surprisingly, the largest land use categories are Forest (Private), National and State Forest, and Agriculture, with each category occupying roughly <sup>1</sup>/<sub>4</sub> of the county acreage; the only other relatively large category is Residential Single-Family with approximately 18%. Of the remaining uses, only Transportation, Communications, and Utilities, and Recreation comprise more than 1% of total acreage.

The following map shows current land use on a parcel basis:

#### Figure LU-2



## **Current Density**

In some counties, one can quickly arrive at a reasonably accurate estimate of the density of development by simply focusing on the total area of the jurisdiction. In Oconee County, however, an unusually high percentage of the land is devoted to state and federal forestlands, and is therefore not available for development. For example, Sumter National Forest alone occupies almost 80,000 acres of the county, with Clemson University and the U.S. Army Corps of Engineers possessing thousands of additional acres. It is also worth noting that in spite of the rapid growth experienced in the county during the last several decades, the overall amount of land available for development has continued to drop due to an expansion of both public lands (such as the Jocassee Gorges) and the conservation of larger tracts of private lands through the acquisition of development rights by preservation groups (such as was the case with the effort to conserve portions of StumphouseMountain). Therefore, in any consideration of the available land to support anticipated growth, it is necessary to remember that a significant portion of Oconee County is unavailable.

### **Growth Trends**

As noted above, much of the traditional land use in Oconee County has been devoted in one manner or other to agriculture and forestry. Even relatively significant economic changes, such as were seen with the emergence of the textile industry in the late 1800's, which led many to forgo their traditional agrarian lifestyle in exchange for employment brought by the cotton mills- either directly, or in the service sector that sprang up around ithad little impact on the overall land use pattern. Naturally, while much of the urbanization occurred inside the municipalities, there was some 'spill-over' into the unincorporated areas immediately adjacent, but this did not prove to be significant until the major population growth began in the 1970's.

Prior to the 1970's, life in Oconee County had remained relatively unchanged for many decades; new technologies and conveniences made their marks, of course, but overall, the county remained the rural agrarian area that it had always been. Starting during that decade, however, a number of changes made an impact on Oconee, none of them perhaps major by themselves, but as a whole, capable of changing the face of the region forever. Among the most notable of these, and one likely to be noted as a signal moment in the county's history forever, were the creation of Oconee Nuclear Station, and the recruitment of a number of high-tech industries. These new industries not only provided a major source of good jobs, but represented a steady revenue source much greater than what most counties of Oconee's size typically had. As a result, while the subsequent decline of the textile industry devastated other South Carolina counties, Oconee was able to adjust, and remain relatively prosperous. But perhaps more importantly, certainly as it is related to impacts on land use patterns in the county, the coming of the nuclear facility brought with it major changes that have not only changed today's Oconee County, but will continue far into the future.

Had the nuclear station only consisted of reactors and power transmission facilities, little would probably have separated it from other high-tech industries that have moved to the

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county. But the nuclear facility was different, for it resulted in the building of Lake Keowee and Lake Jocassee. And although Oconee County already had hundreds of miles of shoreline on Lake Hartwell, which had been completed a decade earlier, there had been only limited attempts at lakefront development, most with limited success. Within only a few years of the completion of the new lakes, however, thousands of new residents were moving to Oconee County to live near the water. Perhaps the economic situation in the 1970's and 1980's helped trigger significant migration southward from the big urban centers of the northeast. Perhaps it was the impact of the relative wealth of the baby-boomers, who, unlike their parents, had the wherewithal to relocate for whatever reason; or perhaps it was simply good marketing by developers. Likely, it was all of the above. Of course, we also need to factor in the overall beauty of our region, the moderate climate, relatively low cost of living, and, the fact that an increasing number of individuals were turning away from agriculture, which made more and more land available for development. But regardless of the particular reasons for the growth, the impact of newcomers has been felt in many ways. For example, in spite of the fact that many rural acres remain in Oconee County, in a very short time our county has become much more urban in its landscape.

Record setting economic development activity in recent years has absorbed some previously undeveloped acreage, although much of the industrial and business development has involved the establishment of new industrial parks by the County and the expansion of existing uses, thus limiting the acreage footprint of these activities. With strong economic development comes strong job creation, a factor that typically has a multitude of impacts related to future planning issues, including transportation, housing and retail activity. Presently, according to the Oconee Economic Alliance, many jobs are open and available. Interestingly, many of these positions are not being filled promptly, and one reason cited by OEA is a shortage of workforce or affordable housing in the County. As previously mentioned, the luxury and second home market has been very strong due to lakefront development, but construction of homes in the \$100,000 to \$200,000 range has lagged behind.

New housing production is needed as primary residences for working-age families moving to the County for jobs or for existing residents who may presently be renting or living with another family member.

An increase in the affordable housing stock would, of course, generate many secondary impacts, including a demand for more retail and service develop and the tax base increase that results from such uses. It would in turn impact a number of public facilities, particularly emergency services and the school system. Also, as the most attractive lands for such development are likely to include parts of the remaining prime farmland, we will need to truly consider the role that agriculture will play in Oconee County's future. As has been shown many times before in other locations, large-scale residential development and the commercial development that will serve it does not mix well with the dust, noise, smells and other activities associated with many agricultural practices. With farming already under severe pressures, the potential impacts of unmanaged residential growth could within a short time be devastating. In response to a grass roots initiative by rural residents and property owners, the County has already taken steps to mitigate those impacts with the zoning of <u>substantial</u> acreage to an agricultural zoning category. Many owners and residents were concerned about protecting available farmland and rural homesteads from the encroachment of large subdivisions and commercial development.

### **Growth Management**

Oconee County's initial efforts at land use planning began in the mid-1990's when it adopted its first Comprehensive Plan. Although at the time, the state mandated a minimum of 7 specific elements be contained in a Comprehensive Plan for a jurisdiction to do unlimited land use planning, it also allowed for some planning activities with partial plans. As a result, Oconee County's first plan consisted of only 2 elements: Community Facilities Element, and Land Use Element. Because the County's intent was to implement limited land use regulations, primarily aimed at regulating the height of structures within the transition zone near the Oconee County Airport, only the elements dealing with community facilities and land use were required. Within a short time, however, other issues arose, requiring the County to consider action beyond the scope of what the partial Comprehensive Plan would support. As a result, following the creation of the Planning Department in 1999, staff began drafting a new Comprehensive Plan containing all 7 required elements. This plan was adopted in 2004.

A number of land use regulations, some in the form of separate ordinances, and some created by amendments to existing ordinances, were adopted between the mid-1990's and 2008. These include:

- Height Restrictions Near the Airport- provides for limits on the height of structures constructed near the airport
- Group Home Regulations- limits negative secondary impacts of new group home facilities on neighbors
- Communication Tower Regulations- mandates setbacks, height limits, and other standards designed to limit unnecessary towers
- Sexually-oriented Business Regulations- imposes setbacks and other locational requirements designed to mitigate negative secondary impacts; also, requires an annual permit for all employees

- Land Development and Subdivision Regulations- sets forth standards for the design and construction of residential developments
- Tattoo Facility Regulations- establishes setbacks and other locational requirements designed to mitigate negative secondary impacts
- Vegetative Buffer Requirements- designates a 25-foot natural vegetative buffer (measured from the full-pond elevation contour) for all new developments and projects on Lakes Hartwell, Keowee, and Jocassee
- Sign Control Regulations- created standards for the location and size of new billboard signs

In 2008, Oconee County took perhaps its greatest leap into the realm of land use planning by adopting a zoning enabling ordinance (ZEO). Developed over a period of approximately 2 years, the ZEO was fully implemented in May 2009. The zoning program was designed to primarily introduce use limitations in phases through a combination of relatively unique methods of non-binding citizen initiatives, but to retain the governing body's ability to act as it deems necessary. In brief, all parcels were initially placed in the Control-Free District, which, as the name indicates, imposes no use limitations on the parcel, but establishes the conditions necessary to overlay limited performance standards in certain areas. As a result, to implement use controls, a rezoning is necessary. Over time, as the majority of citizens in the various parts of the unincorporated areas of Oconee County desire it, the program will increasingly provide the protection and management offered by more traditional zoning regulations.

More recently the County has amended the original Ordinance text on several occasions to address several key issues identified in the early years of the program. One example is the adoption of a revised communication tower ordinance. Another is adoption of language clarifying the definition of billboards and their dimensional requirements in order to clearly distinguish between off-premise signs and on-site business signs.

### **Other Efforts**

Growth management is not limited solely to governmental action, for without support and assistance from the private sector, any success will be limited. In fact, the most effective growth management programs are often a combination of public and private efforts. In Oconee County, where growth management is still in its formative stages, most early efforts have been undertaken by the government to limit or remediate problematic situations. Recently, however, Council and the Planning Commission have taken on several important issues involving growth and development. For instance, the Commission is presently considering corridor ordinances for the principle highway corridors in the County, with an immediate focus on Highway 123 between Seneca and Clemson. In addition, the Commission is considering possible revisions to clarify the Lake Overlay buffer provisions, which require a 25' vegetative buffer area to be maintained on parcels within the Overlay. There has been some confusion about the intent of the language as written, and these changes might help builders, property owners and staff to expedite the zoning permit review process as well as insure a proper outcome in the County's efforts to protect these sensitive lakefront areas.

### **Future Growth and Development**

Oconee County's future growth and development, and the changes that will likely stem from it, have led to a number of efforts aimed at translating the potential into a format easily understandable by the average citizen. One such project was sponsored by Upstate Forever, a nonprofit group focused on land use, conservation and growth management education. In 2008, Upstate Forever expanded a growth study originally focused only on counties encompassing parts of the Saluda River Watershed to include Oconee County. The resulting "Growth Projections for Upstate South Carolina", developed from work by Dr. Craig Campbell of the Strom Thurmond Institute at Clemson University, used computer models to assemble graphic illustrations of development projections across the area through 2030. Although the project did not differentiate between types of development, the results provided a look at potential development pattern based on various ranges of population growth.

Another project, "Alternative Futures for the Seneca Watershed Sub Basin", was conducted over several years by Dr. Stephen Sperry and a group of graduate students from Clemson University. Utilizing computer modeling techniques, Dr. Sperry's group considered various scenarios and land uses, and assessed the potential impacts of each within the boundaries of the Seneca River Watershed. This multi-year project focused on the impacts of specific land uses, and the likely results on individual sub-watershed areas. Given the complexity of the project, with different methodology focused on delivering more specific assessments than Upstate Forever's project, the results naturally differed. Regardless of the variation in specific projections, however, both stand as evidence of the growing level of interest in understanding the possible changes in Oconee County's future, with each, and others like them in the future, a useful tool for community leaders to use in formulating plans for managing the changes.

### Visioning

In 2008, the Oconee Alliance sponsored a visioning process for Oconee County to outline better what county citizens wish the county to become in the next couple of decades. As part of the effort, a series of public meetings, facilitated by an experienced consultant overseen by members of a steering committee comprised of local citizens, resulted in the development of the <u>2028 Oconee By Choice</u>, a 20-year plan for Oconee County. Of these goals, a significant number were either directly or indirectly related to land use, particularly among those categorized as Planned Choice and Natural Choice goal areas. The Planned Choice overview states that, "Oconee chooses smart growth and increased economic vitality with a plan that protects what is precious- a way of life, the bountiful resources of nature, and towns and countryside full of inviting warmth." To achieve this, a list of goals is set forth calling for, among other actions:

- management of growth through zoning and other land use regulations
- environmentally sound infrastructure
- reduction in the number of billboards
- ✤ management of storm water runoff
- stepped up enforcement of litter ordinance
- creation of wildlife sanctuaries
- ✤ additional incentives for land owners to preserve and create natural areas
- ✤ impact fees
- expanded public transportation

The Natural Choice overview states that, "Oconee chooses nature's beauty and a small town feel as centerpieces of its life." (15) Goals set for accomplishing this include:

- preservation of all lakes and rivers
- retention of small town and rural characteristics
- ✤ preservation of farms
- protection and expansion of natural green spaces and historic sites
- protect water and air quality
- fund an agriculture conservation bank

Implementation teams are currently working to promote the advancement of these goals with the appropriate entities. Economic Development Strategic Plan

In December 2007, the Oconee County Economic Development Commission completed a strategic plan designed to refocus the Commission's efforts, and better situate the County to overcome impediments to expanding economic development. As was to be expected, land use issues were central to many of the goals established in the plan. Among tasks identified as necessary for success are the identification and reservation of industrial properties for the long-term future, which could be accomplished through zoning, property options, lease or lease-purchase, or staged or outright purchase. In addition, the plan calls for the identification of a growth area in the I-85 corridor, and the adoption of zoning and/or land use regulations to develop and maintain the area's economic development sustainability over time. It should be noted that the I-85 Overlay District, which was adopted by County Council in November 2008, was proposed as a result of the Economic Development Strategic Plan.

### **Future Land Use**

Based on goals established in this and the other elements of this Comprehensive Plan, the 2009 Future Land Use Map set out the manner in which the future growth of Oconee County should occur to attain these goals. The development of the map took into consideration the existing agricultural and traditional rural ways of life and highlighted scenic attributes and natural resources. The map was designed to promote quality development, with the idea that affordable workforce housing must be a part of the mix of the housing stock. The map also outlines areas suitable for fostering sustainable economic development and future growth.

The Future Land Use Map (FLUM) adopted in 2008 reflected an attempt to describe how the citizens of Oconee County wished their county to grow in the near future, which, as the Comprehensive Plan was due for review in 2009, was much shorter than that which is typically found. Relatively general in nature due to a lack of detailed information on existing land use, it divided land use into Residential, Transitional Growth, Agriculture, and Traditional Rural. No attempt was made to differentiate all pockets of commercial and industrial growth, but instead, it stated that a wide mix was anticipated within the Transitional Growth areas based on availability of land and sufficient infrastructure. As for other uses, the Residential areas primarily encompass those regions near the lakes; Agricultural areas focus on those remaining prime farm areas in the southern part of the county; and all other areas, which include large tracts of National Forest lands, and which contain little if any public infrastructure, are designated as Traditional Rural.

The amendments made to the FLUM as part of the 2009 review of the Comprehensive Plan were intended to add refinement and detail, thereby enabling it to better guide growth in a manner consistent with the overall desires of the public. This was at least in part made possible due to the level of discussion and sincere consideration about Oconee County's future that emerged during development of the Zoning Enabling Ordinance. Although past efforts to develop plans and ordinances to guide growth and development always included a public input component, often with varying results, the creation of the Zoning Enabling Ordinance brought about conversations between individuals and groups in a manner never before witnessed.

### **Primary Development Areas**

As is made abundantly clear throughout this document, the boundaries of Oconee County encompass an increasingly diverse mix of land uses and lifestyles. As such, any plans and regulations adopted must be created with the knowledge of these differences, for it is the consensus of Oconee County's citizens that this variation plays a vital role in the attributes most dearly held. As a result, those areas identified on the 2008 FLUM as Residential and Transitional Growth delineate the areas deemed to be most appropriate for targeted growth. Of course, given the possibility that there may be portions of those regions that, for whatever reason, may not be suitable for such designation, or, in the event that categories created in the future are appropriate as well, the concept of formal Primary Development Areas emerged. These areas, shown on the 2008 FLUM as Residential and Transitional Growth, are marked as a specific feature on later versions.

The concept of designated Primary Development Areas originated from a comprehensive review of the Land Development and Subdivision Chapter of the Oconee County Unified Performance Standards Ordinance. Completed in 2008, the review resulted in a series of amendments to the subdivision regulations, as well as the creation of the Unified Road Standards Ordinance. The road ordinance, which contains all standards related to the construction and maintenance of roads in Oconee County, also established rules allowing for a developer to recoup some costs associated with upgrading existing county roads. One of the key components of the process was the creation of a road upgrade list by the County Engineer. This list, which focuses on the safety of existing county roads, prioritizes those roads in areas deemed most suitable for future development. While roads in any part of the county are to be maintained at a safe level, those inside the boundaries of Primary Development Areas are to be upgraded to deal with anticipated growth and development. Future Land Use Map

A Future Land Use Map (FLUM) is a non-regulatory map that acts as a guide for land use planning by graphically illustrating what citizens want their community to look like in the coming years. The Oconee County FLUM was therefore intended to be used as a reference in considering any action on behalf of the County that may impact land use. The map divided regions of the county into categories that represented what the *predominant land use* of that particular area was to be; in no way were the categories to be considered exclusive, but merely a standard by which to weigh proposals related to land usage.

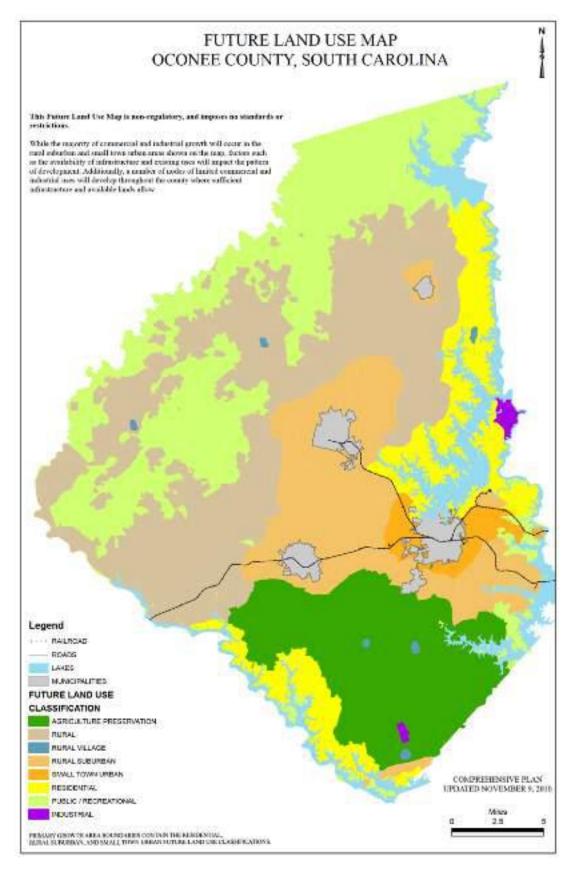
The following classifications were reflected on the Oconee County Future Land Use Map developed at that time:

1. **Agricultural Preservation** identifies those areas deemed to be prime or special agriculture lands, and is therefore vital to the continuation of agricultural

enterprise in Oconee County. Because agriculture-related activities typically impact in some manner most aspects of life within such areas, uses should be limited to those that are compatible with ongoing agricultural activity, and can coexist with the secondary effects commonly associated with it. Dense residential and commercial uses should not be permitted, and infrastructure located and managed so as to minimize undesired development.

- 2. **Rural** identifies those areas characterized by a continuing rural lifestyle and open lands. This area, as a whole, is sparsely populated with little or no infrastructure, but may contain pockets of commercial uses and mixed use villages that serve as hubs of activity in the area. Although not identified as a preservation area, the impacts of new uses should be limited, and not threaten those existing. Dense residential and commercial uses should not be permitted, and infrastructure located and managed so as to retain the overall rural nature of the area.
- 3. **Rural Village** identifies those rural mixed use areas that commonly form the hub of a community. Typically, rural villages are located at the intersection of two or more main routes, and have an existing mix of residential and commercial uses that play a key role in the character of the surrounding area. New uses should be compatible with existing in terms of kind and density, avoiding excessive traffic, noise, and other secondary impacts.
- 4. **Rural Suburban** identifies those areas that have undergone conversion from rural lands to a mix of uses, but is still predominantly characterized by a rural landscape. Infrastructure sufficient to support additional development is reasonably accessible, and pockets of significant development exist throughout. Such areas are suited for additional clusters of relatively dense development, but new uses should be compatible with those existing, and limited in the impact on the overall rural character of the area. In the event such areas are adjacent to other jurisdictions, all new uses shall be compatible with any adopted land use plans.
- 5. Small Town Urban identifies those areas of the densest development. The area is well served by infrastructure, and is suitable for continued development. While new uses may vary in nature and intensity, they should be compatible with a 'small town' atmosphere, and not negative impact those existing. In the event such areas are adjacent to other jurisdictions, all new uses shall be compatible with any adopted land use plans.
- 6. **Residential** are those areas deemed to be appropriate for development primarily focused on residential uses. Such areas may or may not contain significant clusters of existing residential developments, as well as pockets of agriculture, rural, commercial, and other land uses. Although new uses may vary, they should not detract from the overall residential character of area, and not impose negative secondary impacts on nearby properties.

- 7. **Public / Recreation** are those lands primarily reserved for recreational use, and as such are reasonably open to the public.
- 8. **Industrial** are those areas specifically reserved for existing or planned industrial or commercial uses. It should be stressed that this in no way imposes a limitation on the location of such uses in other categories, where appropriate.



### Analysis

The way we choose to utilize our land impacts our lives far beyond simply determining what is built on it. Regardless of the amount of investment in a facility or infrastructure, any benefits derived can be partially or wholly negated by activity nearby. Precious natural or cultural resources, impossible to replace, can be taken from us by the careless act of a neighbor. Even the cost of purchasing and maintaining a home is directly affected by the way surrounding properties are developed and maintained. Without a doubt, land use issues are some of the most critical, as well as potentially controversial- if not unpleasant- that a community must deal with. But for the people of any county to have a say in what their area will become, such issues must be addressed, and they must be addressed before the pressures of development erase the very attributes most cherished. Given the likelihood that Oconee County is facing tremendous growth in the very near future, we have no time to delay.

There are many potential benefits associated with growth and development, provided it occurs in a manner that does not create negative impacts that outweigh the positives. In fact, it is very difficult, if not impossible, for a community to find sustainable prosperity without growth bringing in new wealth. Without such wealth, given the costs of maintaining existing facilities and infrastructure tend to increase over time, stasis leads to decline. At the same time, however, unmanaged growth is just as costly, for without thought given to where and how, as well as how much additional growth can best be accommodated, the community will be burdened with the cost of providing new facilities, infrastructure, and services that could have been avoided. Additionally, left totally to the whims of the free market, those areas most special to a community do not receive due consideration, for so often their true value is not monetary. Based on the recent planning efforts in Oconee County discussed in this element, it is obvious that there seems to be a growing awareness of these facts among a wide cross-section of county residents. And though there has not been a consensus reached on all of the measures needed to achieve it, there is no doubt that the vast majority of citizens share the desire for a prosperous future in a predominantly rural area, surrounded by the array of natural resources that have always made Oconee County unique. Therefore, in the very near future, we must become more proactive in our efforts to identify and create those tools necessary to insure that we do retain our identity.

Although no two communities develop and evolve in exactly the same manner and at the same pace, over time most communities find themselves forced to deal with those same type of issues having been dealt with elsewhere. This can be seen in Oconee County today, for we are increasingly being faced with similar development pressures felt years earlier in some neighboring counties. And because we have to develop our response using basically the same tools available elsewhere, our solutions will probably be similar to those utilized by others. That is not to say, however, that we need to borrow anything wholesale, for Oconee County's evolution is being affected by forces not experienced by most other counties, but we need to keep in mind that we can learn from the successes, as well as mistakes, of many of our neighbors. Therefore, as was the case in the development and adoption of our Zoning Enabling Ordinance, as we look to develop other strategies needed to manage future growth, it will be worth the time and effort necessary to weigh all proposals in terms of their potential for addressing the particular needs of Oconee County, against the possible impositions on current residents.

It is no secret that the ability of a property owner to use their land as they wish has been a cherished ideal throughout Oconee County's history. In fact, this and similar issues are often discussed- and sometimes loudly debated- in various forums throughout the county on a regular basis. In the past, when the population density was much lower, and when the variety of land use throughout most of the unincorporated areas of the county was in one way or another centered on agriculture, the chances of significant instances of incompatibility of use were limited. Today, however, things have changed, for we as a community do not live as we used to. Already, thousands of acres previously devoted to farming or timbering are covered with homes; rural lanes are increasingly being widened to accommodate the traffic of busy commercial centers, a process that itself spurs additional development; and remote, forested hillsides have become densely populated lakeshore communities. Simply put, Oconee County's land is being utilized in ways never anticipated only a few years ago by a population more numerous and more diverse than was ever thought possible by previous generations. Still, for those born here, as well as many of those that move here to escape the grasp of urban areas, a high value is placed on Oconee County's traditionally rural character, with farming at the heart of it. But without standards designed to promote and sustain this rural character, it could soon disappear. Therefore, in addition to identifying those areas in which we wish to have devoted to agriculture, we have to develop the mix of tools necessary to ensure its survival. And while some of these will likely include inducements such as conservation easements, if we are serious in our claim to desire the survival of agriculture as a significant presence in Oconee County, in spite of the fact that it may run counter to the ideals of our forefathers, carefully targeted regulatory measures should have a place in the mix. Otherwise, Oconee County will fast convert into just another urban landscape.

Oconee County will always be subject to the impact of forces beyond its control. And though there is no way to stop all of the negative aspects of some changes, and certainly no way to regain what has already been lost as a result of them, the people of Oconee County now have the opportunity to make key choices that will help insure that future changes are, if not entirely desirable, at least relatively benign- if, that is, people take part, Oconee County has embarked on a course that includes balancing recruitment of high-tech industry with increased tourism as major components of this prosperity; e; and the adoption of a number of land use regulations intended to help guide future development. These steps, although admittedly seen by some to be relatively small ones, are significant, for it signals that Oconee County has begun to look to the future, with its eyes on, at the very least, a sketch of what it wishes to be. And though the vision needs to be clarified as we move ahead, there is little doubt that we, as continues to be stated time after time, in one manner or another, know the direction we wish to head.

### Land Use Objectives for the Future

The following objectives are intended to address those needs and desires established within the Land Use Element. See the 'Goals' section of this plan for specific strategies and timelines for implementation.

1. Initiate efforts to develop the foundation of a county stormwater management program prior to federal mandates, thereby allowing for the most efficient and cost-effective implementation possible in the event of designation.

2. Preserve, protect and enhance Oconee County's environmentally sensitive lands, unique scenic views, agrarian landscapes, and topographic features.

3. Promote partnerships and voluntary conservation easements to preserve significant lands and scenic areas under pressure.

4. Continue support of a comprehensive planning process so as to insure that the citizens of Oconee County possess accurate inventories and analyses of existing county conditions, and the opportunity to better manage anticipated future conditions.

5. Create and/or update plans for specific priorities.

6. Encourage development in a way that protects and preserves our natural resources.

7. Manage development in a manner that ensures our natural resources and lifestyle enhance sustainable economic growth and job opportunities.

8. Continue to closely monitor Oconee County's compliance with state and federal airquality standards, adopting and maintaining reduction strategies as necessary.

9. Conserve and protect features of significant local, regional and national interest, such as scenic highways, state parks, and historic sites and expand efforts to promote them for tourism.



# **Transportation Element**

### Overview

This element focuses on Oconee County's transportation system, a major factor in our prosperity and way of life. The system is made up of roads, airports, railroads, mass transit routes, bicycle routes, and pedestrian routes, and is owned and maintained by a mix of public and private entities. This examination will include a discussion of existing conditions, as well as goals and various implementation strategies designed to attain them.

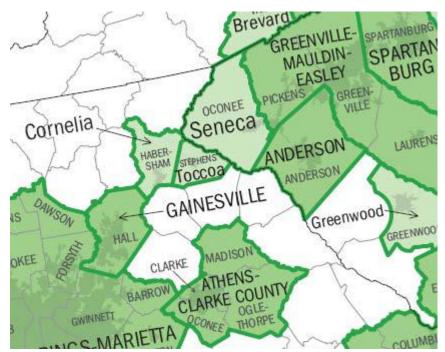
### **Natural Limitations**

Oconee County's location at the edge of the mountains has played a major role in the history of transportation in the county, for the ridges and valleys that serve as a beautiful backdrop to the natural features that attract so many of today's visitors have always also acted as an impediment to easy travel. Even today, it is possible to see the remains of portions of many of those paths and wagon roads, winding through the hills and along the ridges, establishing the routes that much of our modern transportation system continues to follow. Therefore, in spite of the development of safe modern routes throughout the county, the geography and topography of Oconee County continues to have a major impact on travel through our area. Even the rail system that bisects the county, a part of a major route connecting the northeastern United States to the South, skirts along the base of the Blue Ridge, following roughly the same course as the major road routes. With this in mind, as we consider the status of our transportation system, there is no escaping the fact that, as important as travel is to our modern lives, there are practical limits imposed by the surroundings. So, unlike some of our neighboring counties, our transportation goals must be tempered by the knowledge that nature itself, has imposed additional hurdles that many times make the simplest solution, in the end, less than satisfactory.

### Changes

Although the coming of the automobile and modern roads sometimes resulted in dramatic changes in other regions, they had only limited impact on life in Oconee County. Transportation of goods and travel became much easier and more convenient, and

enabling some people to take advantage of increased opportunities for economic gain, and spurring the growth of commercial activity near the towns; but in the larger scheme, the impacts of these changes were limited, and Oconee remained the predominantly rural area it had been since its beginning. Even after the area was linked with the rest of the nation through the Interstate Highway System, travel to major urban areas required a significant effort. Therefore, while many Oconee County residents regularly visited the Atlanta or Charlotte, very few worked there or otherwise commuted on a daily basis. The distance was simply too great. In the last couple of decades, however, signs of change have begun to appear, for the boundaries of the major southeastern urban areas have rapidly ballooned outward, coming increasingly closer to Oconee County, and resulting in an ongoing urbanization of portions of the county. As a result of this growth, the U.S. Census Bureau recently declared Oconee County to be a micropolitan area, which means the county contains an urban cluster of at least <u>66,215</u> people. See Map T-1 (below).





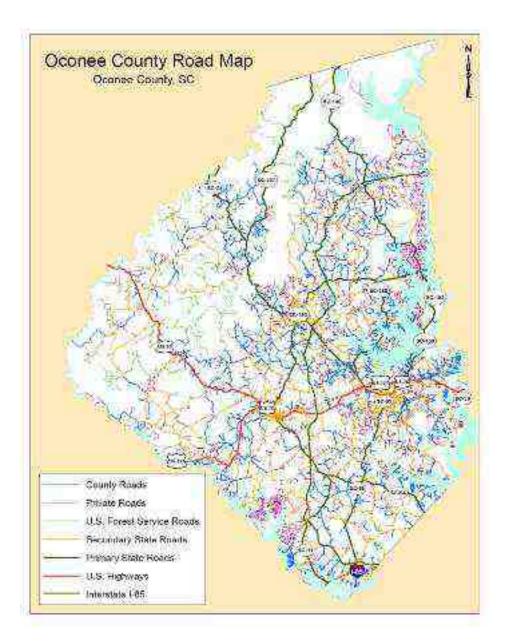
Source: US Census Bureau, "Metropolitan and Micropolitan Statistical Areas of the United States and Puerto Rico November 2007".

Map T-1 shows the Oconee County, along with its neighboring Georgia counties of Stephens and Habersham, as one of the links between the Atlanta Metro Area and the Greenville-Spartanburg Metro Area, which is linked to the Charlotte metropolitan region by the micropolitan South Carolina counties of Cherokee and Union. As the metro areas continue to expand and move closer, traffic on existing transportation arteries will continue to grow. Today, barring traffic slowdowns, an Oconee County resident living near Interstate 85 can commute to work in the Atlanta metro area in approximately 45 minutes, which is approximately the same amount of time typically needed to commute to work from western Oconee County to the City of Anderson, where many Oconeeans have traditionally found work through the years.

#### **ROAD NETWORK**

MAP T-2 (below) shows all federal, state, county and private roads in Oconee County.

#### MAP T- 2



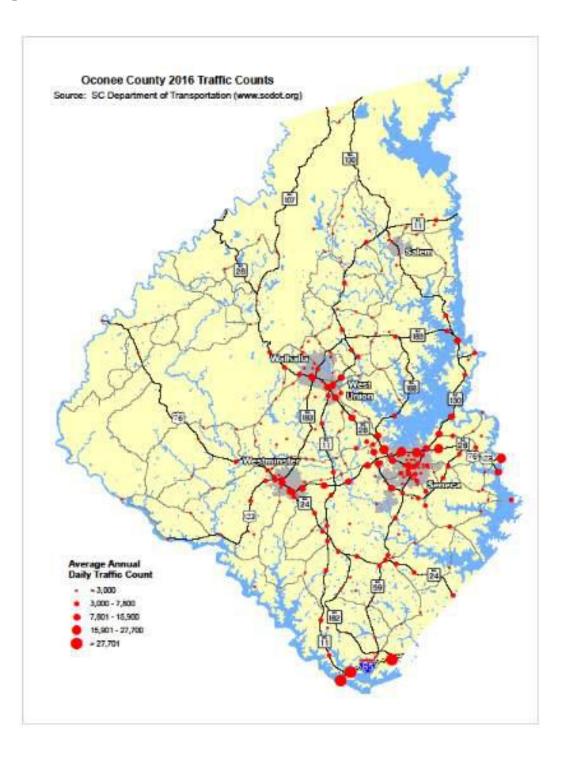
#### **State and Federal Highways**

According to the Oconee County Geographic Information System (GIS), Oconee County is served by approximately 2370 miles of roads, with 1060 miles comprised of state and federal roads. Those maintained by the South Carolina Department of Transportation (SCDOT) include 8.6 miles of Interstate 85; 50 miles of U.S. highways; 188 miles of primary state routes; and 657 miles of secondary state routes. Also, the U.S. Forest Service maintains 156 miles of roads in the Sumter National Forest. See Map T-3 below.

#### **Traffic Counts**

Map T-3 (below) illustrates the level of traffic recorded on the state maintained roads in Oconee County in 2016. The traffic counts, which are based on average daily trips as documented over time, are a good tool to show not only which state roads receive the most usage, and therefore likely to required the most maintenance and upgrades, but also which areas of the county may have county maintained roads that will require attention.

Map T-3



Map T-3 clearly shows that Interstate 85 was recorded with in excess of 47,300 Average Daily Trips (ADT's). As for other major routes, U.S. 76/123, and S.C. 28 are the busiest routes in the county, with up to 22,700 Average Daily Trips (ADT's) in some areas. Next are portions of S.C. 130, S.C. 183, S.C. 11, S.C. 59, S.C. 188, Wells Highway, and short segments of other roads, with up to12,000 ADT's.

#### **County Roads**

Oconee County currently maintains almost 660 miles of roads, with approximately 1/3 of them remaining unpaved. Overall, the county road system provides safe, relatively efficient routes that serve county residents well with a mix of road types, including:

*Collector roads*- those that typically exceed 800 Average Daily Trips (ADT's) and have the primary purpose of intersecting traffic from intersecting local roads and handling movements to the nearest arterial road. A secondary function is to provide direct access to abutting properties. A road that connects local access roads to the highway systems major and high-speed arterial roads. The collector road provides both land access service and traffic service within residential subdivisions.

*Local road (major)-* those for which the typical number of ADT's range from 401 to 800, and contain two or more access points. The primary purpose is to provide access to abutting properties, and receiving traffic from minor local roads.

*Local road (minor)*- those roads for which the typical number of ADT's range from 0 to 400, and have the primary purpose of providing access to abutting properties. This road normally terminates in a cul-de-sac, loop, or other turnaround, with no more than two access points.

It should be noted that, although county road standards recognize arterial roads, which is defined as a major road that collects and distributes traffic to and from minor arterials and collector streets, there are currently no true arterials in the inventory.

#### **Condition of Roads**

As should be expected, many older roads in the county inventory were not designed and built as the result of any formal planning effort, but evolved from the paths and trails used by our ancestors on foot or horseback; over the years they were widened, straightened, leveled, and better constructed perhaps, but by and large following along the same ridgelines, and crossing streams at the same spots, that have served for centuries. In some cases there is a complete lack of documentation as to how these roads came to be 'county roads', for as in most rural areas, necessity often outweighs formality. Therefore, we have to assume that for many of our roads, a county leader decided to start maintaining this route or another for the benefit of the public, particularly as it allowed for easier transport of farm goods to market. Understandably, little thought was given to the need to plan for future upgrades that would accommodate the vehicles of our era. Many newer roads accepted into the county road system, particularly those taken since the 1970's, differ from many of the old routes in that they were built to serve only a particular development; instead of following traditional routes, these roads are typically laid out to conform to a developer's subdivision design, which often necessitated more engineering to construct than the older routes did. Regardless of how well planned they were, however, there have been different standards applied to county roads over the vears, leading to a wide range of conditions existing in the road inventory today. It has only been during the last two decades that significant energy has been put forth toward achieving consistency. Among the most notable efforts has been the development of modern road standards that today, by and large, not only match those of most other counties in the region, but also conform to those established by the South Carolina Department of Transportation. The current version of these standards was adopted in 2008 in the Oconee County Unified Road Standards Ordinance.

There is no doubt that the development of modern road standards has resulted in an overall improvement in the quality of the county road system, making them not only more cost-efficient, but also safer for the public. Therefore, roads accepted into the county road system recent years are considered to be with few exceptions well-built, safe, and relatively easy to maintain. Many older roads, however, are of lesser quality, with some considered marginal, at best. Therefore, one of the major tasks facing Oconee County is to develop a method of creating a comprehensive road maintenance and upgrade program. Currently, Oconee County is implementing a systematic approach to evaluating and prioritizing roads for maintenance activities, with safety being of the greatest concern. But the identification of those roads is only one component to improving the system, for there remain impediments to creating a comprehensive program.

In past years, the amount of funding for road improvements has varied, \$1,485,293 in 2014; \$1,523,708 in 2015; \$1,946,175 in 2016; \$1,337,088 in 2017 any funds not used for that year are set aside instead of being put into the General Fund. Another major hurdle associated with upgrading the road inventory is the lack of deeded road right-of-way, for in years past, many county roads were taken into the system without any. As a result, a number of roads are maintained with only prescriptive right-of-way, enabling only 'ditch-to-ditch' repairs; no upgrade of work can be performed outside of the existing boundaries of the road, prohibiting any widening that may be needed as a result of

increased traffic. Efforts to obtain the necessary right-of-way have in many cases proven to be problematic, for County policy to date has been to attempt to obtain right-of-way by donation only. Some projects have been delayed for years, and in some cases, indefinitely, by the refusal of a property owner to provide the necessary right-of-way. As a result, in spite of utilizing an evaluation and prioritization system, it is not possible to develop a truly systematic maintenance program that addresses the maintenance issues of all county roads on a need basis. Given the anticipated growth and development that will surely impose greater traffic volume on at least some of these roads, it is imperative that the County's road maintenance program include the use of all reasonable avenues available to it in obtaining right-of-way, including the consideration of implementing, at least on those roads deemed most critical, imminent domain.

#### Long Term

A long-term goal would be to establish road maintenance and upgrade system that is based on a wide array of variables, and operates in a smooth and systematic manner. One of the most common standards for measuring the ability of a road system to support existing and anticipated traffic across the nation is the Level of Service (LOS) system, which assigns roads grades A to F, with A being the best, and F the worst. The system allows a local jurisdiction to review each road in terms of travel speed, time required for travel between points, freedom to maneuver between lanes, slowdowns and interruptions from traffic, travel comfort and convenience. This provides an assessment of the overall condition of the road system, and highlights those roads most inadequate. Also, the LOS system provides a community with a simple method of establishing a minimum level of acceptability for roads. Given that few jurisdictions have the resources to maintain many of their roads in an 'A' condition, for, as with any other capital item, economic limitations necessitate that need determine the priority of those items demanding attention. Therefore, there is a level below which the cost of maintenance, and the potential liabilities resulting from safety concerns, becomes unacceptable. Therefore, many communities adopt a policy of prioritizing upgrades based on LOS, with the goal of allowing no road to fall below a particular grade.

The LOS grading system is outlined in Table T-1 (below):

Level of Service (LOS) Characteristics		
Grade	Conditions	
A	Traffic flows at or above the posted speed limit, with lane changes unrestricted; overall, travel is comfortable and convenient	
В	Slight congestion with maneuverability somewhat restricted; all lanes occasionally occupied, but speed not reduced.	

Table T-1
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С	Traffic level often limits ability to pass or change lanes, but volume remains within design capacity; conditions are typically safe for travel at posted speed limits. LOS C is often the target for highways.
D	Traffic volume sufficient to slow travel speed somewhat, with all lanes often occupied, but conditions remain typically safe. Given the cost of upgrading and/or adding roads versus the benefits gained, LOS D is often considered adequate for roads during peak hours.
E	Traffic flow is irregular, with speeds consistently slowed below posted limits; volume is approaching design limits. LOS E is often considered acceptable in larger, densely populated urban areas.
F	Traffic flow is typically slowed or stopped due to volume, with travel seldom accomplished at posted speeds; traffic jams common. Level of demand on LOS F roads is beyond design capacity.

It should be remembered that LOS is intended to describe the average or typical condition, and is not impacted by conditions at any given moment. Therefore, a road graded LOS A is subject to temporary closure due to an accident or road work without being reduced; permanent changes in traffic volume from new development or rerouting, however, can result in a reduction.

#### **Private Roads**

Approximately 625 miles of privately maintained roads are located throughout Oconee County. Although most of these are primarily driveways and drives that access private neighborhoods, some are utilized as access to amenities open to the public. Few, if any, however, are considered public thoroughfares. Among the major developments that maintain their own road system are Chickasaw Point, Keowee Key, and The Cliffs.

As with the County road inventory, private roads vary tremendously in condition across the county, with some providing excellent service, and others barely passable. Currently, there is no system either in place or under consideration for accomplishing upgrades needed to mitigate the deficiencies. In 2008, however, Oconee County adopted standards for new private roads. The following outlines the 3 classifications of private roads established in the standards, and highlights some of the requirements (see the Unified Road Standards for the Unincorporated Areas of Oconee County for more information):

Private Driveways (serves 0-3 residential dwellings)- No design standards, but must meet all applicable building and fire codes Private Drive (serves 4-10 residential dwellings)- Driving surface 20' wide, with 50' of right-of-way; appropriate signage, sight distance, and other basic requirements; meet all applicable building and fire codes Private Roads (serves 11 or more residential dwellings)- Meet most standards applicable for public roads of a similar nature Perhaps the greatest concern related to private roads, at least from the County's perspective, is balancing the wishes of the private property owners with the need to maintain accessibility for emergency services, for providing a minimum level (whatever that is determined to be) of response to calls for emergency assistance is one of the primary functions of most local governments. Typically, for sparsely populated rural jurisdictions, this level is relatively low, if for no other reason than the tax base is often too small to support a robust system. For larger communities, however, the level of response is usually increased, both as a result of the increase in revenue, and also the greater level emergency service expected by urban populations. Therefore, as Oconee County grows and develops, it should be expected that the population will demand greater levels of emergency services. To be able to equitably provide this service, however, there needs to be a minimum level of access for responders, both to benefit those requesting the assistance, and also to insure the safety of emergency personnel. While the recent adoption of private road standards insures that future routes will be adequate, there needs to be a determination as to what will be the minimum level of access necessary, and by what method the standard will be achieved.

#### MASS TRANSIT

#### **Existing Conditions**

Public transportation services throughout the state are coordinated by the Division of Mass Transit of the South Carolina Department of Transportation (SCDOT). This agency's duties extend to oversight of the distribution of all state and federal mass transit funds, the development and implementation of regional transit plans, and monitoring of grants. Although public transit has traditionally been limited primarily to urban areas in South Carolina, in recent years there has been a growing interest in expanding service even to some rural areas. And though the term 'mass transit' typically brings a city bus system to mind, it actually encompasses a variety of providers offering a range of services, including not only municipal transit systems, but also more specialized services; from the typical fixed route system providing the general public transportation to employment, shopping, or other daily activities, to door-to-door services such as are offered by councils of aging, public transit is an increasingly important component in our region's transportation system.

Currently, the only mass transit system serving the general public in Oconee County is the Clemson Area Transit System (CAT), which provides free bus service in and around the City of Seneca, and along U.S. 76/123 between Seneca and Clemson. And though the service in Oconee County is only several years old, ridership statistics indicate that it has already become an important fixture in the Seneca area. The success in Seneca has given

rise to consideration of expanding the 'CAT Bus' system to the cities of Westminster and Walhalla, with a feasibility study conducted in 2008. There has also be some discussion of the possibility of the development of a smaller van service, less expensive to establish and operate, but linking with the CAT system, thereby accomplishing the same goal. Either way, an expansion would not only provide public transportation services linking the major population centers of Oconee County, but would also link Oconee County's largest towns with the other towns served by CAT. Currently the issue is still under consideration, but given Oconee County's projected growth and urbanization, mass transit is likely to become a major component in our future transportation system.

#### **Future Needs**

Unlike in past years, when the only solution to crowded roads was to upgrade existing roads or build new ones, particularly in rural areas such as Oconee, the focus is shifting toward more efficient use of existing routes; in short, moving more people in fewer vehicles. Not only does this avoid the increasing cost of road construction, but it also preserves landscapes that would be altered by the additional pavement. It should be noted that Oconee County's decision to develop our tourism industry into a major component of our economy, which is focused on our natural and cultural resources, necessitates careful consideration of road projects; while an adequate road system is vital for any community's health and economic wellbeing, the impact on an area's scenic attributes and lifestyle resulting from the road may result in losses that are not easily shown on a spreadsheet. As a result, although the costs of establishing a public transportation system may appear on the surface to be greater than simply adding some lanes to a road, over time, the impact on the scenic character and 'small town' feel of an area may actually cost more through lost tourism revenues.

Another important aspect of the consideration of mass transit in Oconee County lies in the change in attitudes toward public transportation among the general public. Like the citizens of many other rural areas, Oconee County residents have traditionally harbored an attitude that praised independent action and providing for oneself; combined with this, of course, is the American love of the automobile, which enables a person to come and go at will. On the other hand, mass transit was often perceived as a 'city thing', or, for many, something for those that could not provide for themselves. Either way, for many in rural areas such as Oconee, a negative thing. As a result, an effort to develop mass transit for the general public never took root until the last decade, when a number of changes have resulted in a change in this attitude.

Finally, this change in attitude has come to the fore as a result of an increase in the mobility of our society, with not only more of us trying to go from place to place, but it

costing more to get there. Our parent's generation, regardless of where they lived, as a rule lived a much more sedentary life than we do. And while there were for many of them occasional long trips, these were not usually made on a whim, but typically for some special reason. To even begin to analyze the reasons for this change would take up far more space than serves our purpose at present, for there are not only social and cultural issues at play, but also the influences of technology and economics, as well as possible others. Suffice it to say, therefore, that as never before, we are living in a time of the rapid growth and development of a very mobile society in Oconee County; at the same time, many believe that recent economic changes will quite likely diminish the traditional desire, if not ability, for many people to purchase and maintain an automobile; and this at a time when advances in areas such as connectivity and communication are fast removing many impediments and inconveniences of travel, which will likely spur even greater mobility. As a result, Oconee County's transportation system, which is focused almost exclusively on transporting people in private automobiles, is limited in sustainability. Therefore, it is vital to begin viewing mass transit as a part of Oconee County's future transportation system, with efforts to partner with the appropriate entities in establishing the foundations of such a system undertaken in the near future.

#### AIR

#### **Existing Conditions**

Oconee County residents are fortunate to be located within a relatively short distance from a number of airports, offering a number of air travel choices. First, the Oconee County Regional Airport is a general aviation airport that has become a vital component in the county's economic development, which a number of businesses utilize the airport to conveniently visit local facilities. Also, due to the fact that it is only approximately a 5-minute drive from the Clemson University campus, it is often used by the school for various travel purposes, and hosts the school's aircraft. Additionally, the proximity of the airport to university athletic facilities makes it very popular with fans that like to fly in to attend sporting events. **Oconee County Regional Airport Terminal** 



Other small airports located close by Oconee County include the Anderson Regional Airport, which is located off S.C. Highway 24, 3 miles west of the City of Anderson, South Carolina, and has 4 runways.-Over the years, a number of upgrades have been made to the facility with-an expansion of the runway was completed in 2015 to 5,000 feet. A Jet Porter that moves big aircraft was purchased in 2017.

The Oconee County region is also served by several major airports. The Greenville-Spartanburg International Airport (GSP), located near Interstate 85 in Greer, South Carolina, about an hour's drive from Oconee, offers both passenger and air cargo services, with an average of 50 non-stop daily departures linking our region to cities throughout the United States. The facility hosts 5 major airlines with direct service to 14 major cities and 15 major airports across the U.S. with more than -2 million passengers, and transport more than 30,000 tons of air cargo. The runway is 11,001 feet long, which enables it to accommodate all sizes of aircraft currently operating.

#### **Future Needs**

The Oconee County Airport, already important to the area's economic wellbeing, positioned to become an even greater asset. As it sits near U.S. 123 in one of the fastest growing areas of the county, the facility offers easy access to destinations throughout the primary development areas of the county, for both business and private customers. Also, its existing linkage with Clemson University provides a foundation for the development of even great partnership, particularly as the school expands its position as one of the premier research institutions in the nation.

#### RAIL

#### **Existing Conditions**

Although rail service played a major role in Oconee County's growth and development, it has declined significantly in recent decades. Currently, there are no operating passenger stations or points of assess within Oconee County. There is, however, the Clemson station, located just east of the county in the City of Clemson, and the Toccoa, Georgia, station a few miles to the west, which provide local residents access to the Amtrak Crescent Route that runs between New York and New Orleans. As the current schedule includes 2 stops in Clemson each day (early morning and late night), and only special requested stops in Toccoa, the stations are only open part time to accommodate arrivals and departures, and do not operate a ticket office or provide baggage assistance.

Most of the rail traffic moving through Oconee County is dedicated to freight transportation. With the main rail line that parallels U.S. 123 serving as a major artery for Norfolk Southern between Charlotte and Atlanta, many thousands of tons of freight pass through Oconee County on a daily basis. Few local businesses, however, rely on transporting freight directly to and from their facilities by rail, for most have turned to truck transport, leaving a number of miles of secondary 'spur' rail lines seldom used.

#### **Future Needs**

Although the level of utilization of rail transportation has declined significantly in the last few decades, most of the rail routes remain, allowing for the possibility of future expansion. And because these routes connect 4 of the 5 municipalities in the county, thereby providing a link between the more densely populated sections, the potential exists for the establishment of some form of light rail service in at least a portion of these regions is possible.

#### PEDESTRIAN AND BICYCLE



Oconee County's natural beauty is known far and wide, and has over the years encouraged countless residents and visitors to abandon vehicle travel and strike out either on foot or bicycle.

The following is a list of the Oconee County Trail Miles: T-2

Park	Trail Miles
Chau Ram (County)	2.7
South Cove (County)	0.4
High Falls (County)	0
Devils Fork (State)	GIS data not available
Hartwell (State)	GIS data not available
Oconee (State)	8.0
Other (Foothills Trail, Chattooga River trails)	72
Palmetto Connector	3.8
Blue Ridge RR (Issaqueena Falls)	2.0

The focus of activity, however, has been almost exclusively directed at recreation, for while we have over 75 miles of maintained trails in the county (Table T-2), and a number of sections of bicycle lanes on state-maintained highways, little of this is intended to facilitate travel between home and work, shopping, or other destinations that most people consider normal parts of their day-to-day life. While an increasing number of people view this imbalance to be problematic, it is important to note that Oconee County is not alone in this aspect, for the development of America's transportation system has been focused almost exclusively on development of facilities for motorized vehicles. As a result, pedestrian and bicycle transport have been widely viewed as being 'old-fashioned' modes of travel; and, as is the case in other predominantly rural parts of the country, where residences are often separated from destinations farther than can be quickly traveled on foot or by bicycle, non-motorized transportation has traditionally received little consideration. Recently, however, this attitude has begun to change.

To start with, economics have led some people to look for alternatives; the continuing rise in the cost of purchasing and maintaining- and fueling- ever more complex vehicles is, for many, a significant financial burden. Also, there is an increased awareness of the effects of pollutants emitted from automobiles on the environment, with the acceptance of the need to prioritize 'green' ideals having come to the fore front in the last decade. Perhaps more important still is the change in attitude toward our overall way of life, for as the population becomes larger, there has been a turn toward living in communities similar to those that evolved prior to the development of the automobile. Instead of seeking sprawled-out developments, there has been a fast growing popularity of what are known as 'traditional neighborhoods'; communities with uses are mixed, with residences, businesses, and commercial situated near each other, allowing residents to carry on most day-to-day activities without having to resort to an automobile. Recognizing this shift, a number of governmental entities, including the State of South Carolina, have begun to adjust their focus to start prioritizing alternative forms of transportation.

On February 20, 2003, the South Carolina Department of Transportation Commission officially broadened the scope of their mission by making bicycling accommodations part of everyday operations within the state transportation system. As a result, the agency has prioritized adding bicycle lanes to appropriate stretches of new roads and existing roads, as well as designing and constructing facilities as part of upgrades of existing roads. This change in attitude will now make it possible to safely travel by bicycle- or by foot- in areas previously only traversed by vehicle. Of course, this does not mean that a well laid out network of routes will exist across the state in the very near future, but, over time, it should become easier to accommodate these alternative forms of travel.

On the local level, as new developments and communities are planned, the existence of pedestrian and bicycle friendly routes will serve to attract the attention of developers seeking to take advantage of the growing number of people desiring to reduce the time spent in their cars. Already, the issue of designing walkable and bikeable projects in Oconee County is of growing interest for developers, with the trend expected to continue. Given the growing emphasis on physical activity and healthy lifestyles across America, projects that meet such expectations are likely to prove to be more successful than those that fail to recognize the change. As these are currently only individual efforts initiated by private entities, however, there remains a lack of connectivity between most of these and existing development. As a result, a major priority for Oconee County is to begin looking for ways to establish a network of trails and paths, situated to allow for the expansion of pedestrian and bicycle routes into areas of existing development.

This effort to expand connectivity should not be undertaken without due diligence, however, for there are problematic issues facing any community attempting to become more friendly to non-motor transport. In some areas, simply adding a few sidewalks or bike lanes is sufficient, and desirable, for such facilities many times change the character of a community for the better, allowing for a reduction in vehicle traffic that not only helps to quiet areas, but also encourages greater interaction of neighbors as they meet face to face instead of in moving cars. But in other areas, there are potential liabilities that may overshadow, or at least limit, any derived benefits. For example, beyond basic maintenance costs, particularly in more densely developed areas along major traffic corridors, the decision to encourage people to travel in close proximity to vehicles must be considered for their safety; the least of these concerns include accommodations necessary to allow for pedestrians to cross safely from one side of the highway to the other. Typically, this means adding a crosswalk, traffic lights, and possibly establishing a speed control zone. While improving pedestrian safety, such measures will in most cases impede the free flow of traffic. As a result, as we move forward with becoming more pedestrian friendly, it is important that we review proposed changes from a holistic viewpoint, recognizing that while the establishment of routes designed to encourage foot traffic are increasingly popular and desirable for a number of reasons, there is an interconnection of all aspects of our transportation system. This demands that before undertaking any significant change in our focus on transportation facilities, we conduct a comprehensive feasibility study to determine where, and in what form, pedestrian routes will not only work, but will enhance the lifestyles in the greatest manner possible for the investment required to accomplish the changes.

#### ANALYSIS

Transportation Objectives for the Future

- 1. Work to upgrade road system in a manner that provides safe and efficient routes throughout the county, while limiting the negative impacts on sensitive areas.
- 2. Support the expansion of mass transit in Oconee County.
- 3. Encourage the establishment of high-speed rail in the region.
- 4. Upgrade and expand the Oconee County Airport in a manner that not only serves existing clientele, but will establish the facility as one of the premier small airports in the nation.
- 5. Encourage the expansion of bicycle and pedestrian routes in areas appropriate



# **Priority Investment Element**

#### Overview

Pursuant to the requirements of the South Carolina Priority Investment Act (PIA), adopted in 2007, local governments are required to include an element in their comprehensive plans that focus on anticipated capital expenditures over the coming 10 years, prioritizing those deemed most critical. The element must also discuss potential methods of funding for the projects, considering all likely federal, state, and local sources. Additionally, the PIA mandates that the list of projects includes all projected needs in public infrastructure and facilities, including water, sewer, roads, and schools, and that the list is provided to all "adjacent and relevant jurisdictions and agencies" for their review and comment. It should be noted that other requirements established by the Act are addressed in other elements of this plan.

#### **10-Year Capital Needs**

The Planning Commission is charged with identifying a list of those capital projects in Oconee County that are anticipated to be funded with public monies in next 10 years. The list of projects is to be reviewed and considered as part of the Planning Commission's annual recommended prioritization of projects for County Council. The source of projects to be considered on the list may be, but is not limited to, the listed needs of various County agencies on their 5-year Capital Improvement Plans (CIP), school board building programs, and other public infrastructure and facility requirements identified as critical to the citizens of Oconee County. Identified projects are listed on the "Ten-Year Capital Needs Plan for Oconee County", which is contained in Appendix A of this document.

#### **Funding Options**

#### Bonds

The primary source of revenue for county capital projects are General Obligation Bonds (G.O. Bonds). G.O. Bonds are secured by the County's projected future property tax revenue stream. It should be noted that the State of South Carolina limits the amount that local governments can borrow through G.O Bonds to 8% of the assessed value of the County's

votes; therefore, only those funds available within the 8% limit can be considered a steady funding source.

In order to project the amount of capital funding that Oconee County may reasonably expect to be able to access through bonds in the coming decade, it is necessary to review past activity and bonding capacity. It should be emphasized that the amounts derived through this process are based on history, and although relevant for the purposes of this examination, may not necessarily indicate future conditions. Table PI-1 (below) shows the total taxable assessed values for Oconee County from 2003 to 2008. The utilization of the values recorded over a 5-year period will typically include at least one reassessment of all taxable properties in the County, thereby updating those values and improving the accuracy, and making it possible to establish reasonably reliable averages to use in projecting future funding levels into the near future.

Table 1	PI-1
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	Т	otal Taxabl	e Assessed V	Value by Fis	cal Year		
						Average	Average
						Assessed	Percent
2013	2014	2015	2016	2017	2018 *	Value	Change
\$515,557,710	\$521,294,691	\$525,343,034	\$546,294,072	\$559,921,105	\$562,810,506	\$543,132,682	2%

Source: Oconee County Finance Department and Auditor's Office

\* 2018 Total Taxable Assessed Value is an estimate, due to actual values not being available at the time of this report.

Using the average assessed value of \$543,132,682 shown in Table PI-1, it is possible to establish a projected annual increase of 2% over the next 10 years. See Table PI-2 (below).

Table PI-2

Р	rojected Lega for F	l Debt Limit 'iscal Years 2		County
Fiscal Year	*Assessed Property Value	**Debt Limit	***Outstanding Debt by Year	Projected Legal Debt Margin
2019	\$ 552,787,322	\$ 44,222,986	\$ 12,340,000	\$ 31,882,986
2020	562,613,583	45,009,087	11,291,000	33,718,087
2021	572,614,513	45,809,161	10,216,000	35,593,161
2022	582,793,218	46,623,457	9,105,000	37,518,457
2023	593,152,859	47,452,229	7,952,000	39,500,229
2024	603,696,650	48,295,732	6,758,000	41,537,732
2025	614,427,867	49,154,229	5,527,000	43,627,229
2026	625,349,840	50,027,987	4,255,000	45,772,987
2027	636,465,960	50,917,277	3,340,000	47,577,277
2028	647,779,678	51,822,374	2,390,000	49,432,374
2029	659,294,508	52,743,561	1,625,000	51,118,561

Source: Oconee County Finance Department and Auditor's Office

\* Assessed Property Value projections are based on the average annual change in the taxable assessment value from fiscal year 2013 through 2018, which resulted in 2%. Refer to Table PI-1. \*\* Under South Carolina Constitution Article X, Section 14, 7(a), Oconee County's outstanding general obligation debt should not exceed 8% of the total assessed property value. \*\*\* Projected values are based on existing fiscal year 2018 payment schedules.

The legal debt margin for Oconee County is projected to increase in the coming decade from \$31,882,986 to \$51,118,561 as a result of increased assessed property values. Naturally, any additional bonds utilized to fund capital projects in the interim would directly reduce the available amount, as would any significant decrease in assessed property values.

#### **Other Sources**

<u>Designated Funds-</u> Another option to provide a regular funding source for capital projects is to designate a specific portion of annual revenues as a 'set aside' for capital projects, much as Oconee County has done in the past with the reservation of one mill for economic development projects. Naturally, such a plan would only cover a limited portion of the overall capital needs of the County, but it would serve as a steady funding source for the purposes of planning for projects. One possible use for a regular set-aside could be to escrow the monies for specific multi-phased projects to be accomplished over a long period of time, or for those items that require significant upgrades on an ongoing basis. Also, for those projects that primarily serve only a limited region of the County but stimulate additional development, such as the expansion of infrastructure, it may be appropriate to designate a portion of the tax increment stemming from the new development, either to replenish the fund of designated monies, or to accomplish additional phases of the project.

<u>Special Tax-</u> In recent years, Oconee County has attempted to utilize a special one-cent capital infrastructure tax to assist in financing various projects. The tax, which has already been used in several other South Carolina counties, is governed by strict state guidelines that limit the applicability of funds primarily to the development and construction of a project. In brief, a 6-member commission made up of representatives from both the incorporated and unincorporated areas of the county creates a list of projects to be funded by the tax. The list is presented to County Council, who may either approve or reject the specified projects with no changes. If approved, the list of projects and projected costs are then part of a referendum question that must be voted on by the electorate. A majority vote supporting the tax initiates the levy, which will be in place no more than 7 years, with the tax ending sooner if actual revenues exceed the projected amount. If such an effort succeeds, the tax will be a reliable funding source for some projects; however, as with efforts to exceed the 8% assessable value limit on bond capacity by referendum, the outcome of votes cannot be reliably anticipated. Therefore, prior to the successful implementation of the one-cent capital infrastructure tax, it cannot be considered a steady funding source for future capital needs.

<u>Grants-</u> The use of grants become an increasingly important revenue component for many communities, with Oconee County being no different. In recent years, grants from state and federal agencies have enabled the County to move ahead with a number of projects that would otherwise have been delayed, or possibly even never realized. In spite of their value in providing needed funding, however, grants are at best of limited value for planning purposes, for the availability of funds needed for a specific project can seldom be reliably anticipated far enough in advance to allow for them to be considered a steady funding source. The competition for a limited pool of money from an ever growing number of potential applicants, combined with and the impact of the whims of economics and political moods,

often results in an ever-changing amount of grant funds. Grant money, therefore, while a wonderful supplement to turn to for specific capital projects, should not be considered a major steady source of revenue.

Impact Fees- A major revenue source for funding capital projects in some South Carolina counties is development impact fees. In spite of the fact that Oconee County has not enacted impact fees to date, they continue to receive public support as an option for funding roads, parks, libraries, and other capital improvements. It should be noted, however, that the South Carolina Development Impact Fee Act imposes a number of stringent requirements on local governments seeking to develop a program. For example, prior to the adoption of an impact fee for residential units, the local government must study and publish a report on the potential impacts of the fee on affordable housing within the jurisdiction. Also, the local ordinance creating the fee must specify the improvement that the money is to be used for, with the amount of the fee being based on verified costs or estimates established by detailed engineering studies. Once adopted, impact fees may be applied only for the period stated in the enacting ordinance, with all monies collected from the fee identified in a published annual report, detailing the collection, appropriation, spending of any portion. As a result, impact fees remain a viable alternative for Oconee County to consider as a funding source for future capital improvements, but the creation of a program will likely require significant assistance from an experienced consultant.

<u>User Fees-</u> Currently, Oconee County does not collect user fees for utilizing county-owned facilities. Although they can be considered a steady source of funding, user fees and other miscellaneous types of revenue typically generate only a portion of the amount associated with constructing and operating a facility. There are exceptions, however, for facilities such as recreation complexes many times combine these fees with concession monies, entry fees for events, and other miscellaneous revenues to achieve profitability, which can, in turn, be used to retire debt or upgrade a facility. Other types of facilities, however, simply do not lend themselves to the application of user fees. When appropriate, therefore, the County should consider user fees and other miscellaneous revenue as a funding source for capital projects.

#### **Another Consideration**

The anticipated rate of growth and development in Oconee County's future gives rise to the need for a systematic approach to paying for public infrastructure and development, for the level of service and convenience demanded by the many thousands of new residents will require a more efficient approach that has been evidenced in the past. While it is reasonable to assume coming growth will bring with it additional revenues with which improvements may be accomplished, not all growth is equal in the amount of revenue generated, or

additional support required. In fact, without all of the necessary tools in place to manage the amount and type of growth necessary to make it sustainable, it is possible that the needs will outweigh the ability to pay for them. This means it is important to begin to consider the effects of all our actions in terms of the impact on development, positive or negative, and how the results change the level of service necessary to support it. Therefore, we should seek to establish how much growth our existing infrastructure and facilities can support, and map out a rational approach for moving toward the densities and type of growth the people of Oconee County desire.

#### **Priority Investment Objectives for the Future**

The following objectives are intended to address those needs and desires established within the Priority Investment Element. See the 'Goals' section of this plan for specific strategies and timelines for implementation.

1. Promote partnerships and voluntary conservation easements to preserve significant lands and scenic areas under pressure.

2. Continue support of a comprehensive planning process so as to ensure that the citizens of Oconee County possess accurate inventories and analyses of existing county conditions, and the opportunity to better manage anticipated future conditions.

3. Review, update and adopt the Infrastructure Master Plan.

4. Develop and implement an effective Capital Projects Program that provides the highest level of service and facilities for Oconee County's citizens.

5. Explore and evaluate alternative methods of obtaining revenue and grant monies to fund capital improvements and new infrastructure.

6. Create and/or update plans for specific priorities.

7. Complete and properly maintain Oconee County's Geographic Information System (GIS).

8. Encourage development in a way that protects and preserves our natural resources.

9. Manage development in a manner that ensures our natural resources and lifestyle enhance sustainable economic growth and job opportunities.

10. Promote and enhance access to affordable housing through both public and private cooperation.

11. Upgrade solid waste facilities to improve services and allow for needed upgrades and expansion to provide for anticipated growth.

12. Regularly review public safety needs and enhance facilities as required.

13. Work to address the age-related problems that may arise among Oconee County's aging population, particularly focusing on issues not adequately dealt with by state and federal efforts.

14. Upgrade and maintain the county road system in a manner that meets the needs of Oconee County's growing population and provides safe and efficient routes through the county.

15. Continue to evaluate and fund public transportation in urbanizing areas of Oconee County, expanding as needed to provide for ongoing growth and development.16. Expand bicycle and pedestrian routes to allow for greater use of alternative forms of transportation, and to promote ecotourism opportunities.

17. Continue upgrades to the Oconee County Airport in a manner that not only serves existing clientele, but will establish the facility as one of the premier small airports in the nation.

18. Establish programs to review all existing community facilities to determine needed changes resulting from both the aging of the facilities and the rapid population growth of Oconee County.

19. Promote a countywide arts program to facilitate an appreciation for the arts and other cultural facilities found within Oconee.

20. Conserve and protect features of significant local, regional and national interest, such as scenic highways, state parks, and historic sites and expand efforts to promote them for tourism.

#### Appendix A

# **Ten-Year Capital Needs Plan for Oconee County**

Anticipated Budget Year3-Year Funding Tir2010Detention Facility2010Expand C & D landfill2010Replace Long Mountain radio2010Wastewater Treatment Facility to serve2010Westminster Fire/Emergency201010 Unit T-hanger and hanger taxiways2010Purchase Land Adjoining Rock Quarry available2010Replace bath house (day use/ campers) Campground (High Falls)2010Chau Ram Park- ADA bathroom and d2010Back scan mortgages & Plats from 1992010Cobb Bridge2010Repave parking lot and roads at Solid V2010Court House renovation2010Upgrade/relocate fuel farm and mainter Airport2010Court House renovation2010Solid Waste building for tires, used oil Hotel & Conference CenterPave South Cove parks gravel roads an roads2010Phase 1 Golden Corner Commerce fuel Airport2010Phase 1 Golden Corner Commerce Parl2010Court House renovation2010Phase 1 Golden Corner Commerce Parl2010Solid Waste building for tires, used oil Hotel & Conference CenterPave South Cove parks gravel roads an roads2010Phase 2, and 3 Golden Corner Commerci infrastructure2010Addition/Renovation at Sencea High S			
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2010Replace Long Mountain radio2010Wastewater Treatment Facility to serve2010Westminster Fire/Emergency201010 Unit T-hanger and hanger taxiways2010Purchase Land Adjoining Rock Quarry available2010Replace bath house (day use/ campers) Campground (High Falls)2010Chau Ram Park- ADA bathroom and d2010Back scan mortgages & Plats from 1992010Cobb Bridge2010Sipplast modified roof membrane for O Demolition2010Repave parking lot and roads at Solid V Demolition2010Court House renovation2010Court House renovation2010Upgrade/relocate fuel farm and mainter Airport2010Oblique aerial photography reflight (Pi Expand Library in Westminster with F Upgrade Cott (Data Processing System New library facilities in Seneca with FF Solid Waste building for tires, used oil Hotel & Conference CenterPave South Cove parks gravel roads an roadsPhase 2, and 3 Golden Corner Commerce		\$ 15,000,000	G.O. Bonds
2010Wastewater Treatment Facility to serve2010Westminster Fire/Emergency201010 Unit T-hanger and hanger taxiways2010Purchase Land Adjoining Rock Quarry available2010Replace bath house (day use/ campers) Campground (High Falls)2010Chau Ram Park- ADA bathroom and d2010Back scan mortgages & Plats from 1992010Cobb Bridge2010Cobb Bridge2010Repave parking lot and roads at Solid V Demolition2010Repave parking lot and roads at Solid V Demolition2010Court House renovation2010Upgrade/relocate fuel farm and mainter Airport2010Oblique aerial photography reflight (Pi Expand Library in Westminster with Fi Solid Waste building for tires, used oil Hotel & Conference CenterPave South Cove parks gravel roads an roadsPhase 2, and 3 Golden Corner Commerce Park		\$ 650,000	G.O. Bonds
2010Wastewater Treatment Facility to serve2010Westminster Fire/Emergency201010 Unit T-hanger and hanger taxiways2010Purchase Land Adjoining Rock Quarry available2010Replace bath house (day use/ campers) Campground (High Falls)2010Chau Ram Park- ADA bathroom and d2010Back scan mortgages & Plats from 1992010Cobb Bridge2010Cobb Bridge2010Repave parking lot and roads at Solid V Demolition2010Repave parking lot and roads at Solid V Demolition2010Court House renovation2010Upgrade/relocate fuel farm and mainter Airport2010Oblique aerial photography reflight (Pi Expand Library in Westminster with Fi Solid Waste building for tires, used oil Hotel & Conference CenterPave South Cove parks gravel roads an roadsPhase 2, and 3 Golden Corner Commerce Park		\$ 300,000	G.O. Bonds
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2010Back scan mortgages & Plats from 1992010Cobb Bridge2010Assess Viability of Future Need for OL Sipplast modified roof membrane for OD Demolition2010Repave parking lot and roads at Solid V Demolition2010Repave parking lot and roads at Solid V Phase I Golden Corner Commerce Park2010Court House renovation2010Court House renovation2010Upgrade/relocate fuel farm and mainter Airport2010Oblique aerial photography reflight (Pi Expand Library in Westminster with Fi Upgrade Cott (Data Processing System New library facilities in Seneca with Fi Solid Waste building for tires, used oil Hotel & Conference CenterPave South Cove parks gravel roads an roadsPhase 2, and 3 Golden Corner Commerce infrastructure	at Knob	\$ 180,000	G.O. Bonds
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2010       Court House renovation         2010       Court House renovation         Upgrade/relocate fuel farm and mainter       Airport         Oblique aerial photography reflight (Pi         Expand Library in Westminster with F         Upgrade Cott (Data Processing System         New library facilities in Seneca with F         Solid Waste building for tires, used oil         Hotel & Conference Center         Pave South Cove parks gravel roads an roads         Phase 2, and 3 Golden Corner Comment infrastructure	Vaste Complex	\$ 100,000	G.O. Bonds
Upgrade/relocate fuel farm and mainter         Airport         Oblique aerial photography reflight (Pi         Expand Library in Westminster with F         Upgrade Cott (Data Processing System         New library facilities in Seneca with F         Solid Waste building for tires, used oil.         Hotel & Conference Center         Pave South Cove parks gravel roads an roads         Phase 2, and 3 Golden Corner Comment infrastructure	-	\$275,000	G.O. Bonds/ ED Millage
Airport         Oblique aerial photography reflight (Pi         Expand Library in Westminster with F         Upgrade Cott (Data Processing System         New library facilities in Seneca with FI         Solid Waste building for tires, used oil.         Hotel & Conference Center         Pave South Cove parks gravel roads an roads         Phase 2, and 3 Golden Corner Comment infrastructure		\$ 5,000,000	G.O. Bonds
Expand Library in Westminster with F         Upgrade Cott (Data Processing System         New library facilities in Seneca with FI         Solid Waste building for tires, used oil.         Hotel & Conference Center         Pave South Cove parks gravel roads an roads         Phase 2, and 3 Golden Corner Comment infrastructure	nance shed at the	\$ 180,000	G.O. Bonds
Upgrade Cott (Data Processing System         New library facilities in Seneca with FI         Solid Waste building for tires, used oil.         Hotel & Conference Center         Pave South Cove parks gravel roads an roads         Phase 2, and 3 Golden Corner Comment infrastructure	ctometry)	\$ 165,000	G.O. Bonds
New library facilities in Seneca with Fl         Solid Waste building for tires, used oil.         Hotel & Conference Center         Pave South Cove parks gravel roads an roads         Phase 2, and 3 Golden Corner Commentinfrastructure	F&E (3,000 sq. ft)	\$ 1,000,000	G.O. Bonds
Solid Waste building for tires, used oil.         Hotel & Conference Center         Pave South Cove parks gravel roads an roads         Phase 2, and 3 Golden Corner Comment infrastructure	)	\$ 100,000	G.O. Bonds
Hotel & Conference Center Pave South Cove parks gravel roads an roads Phase 2, and 3 Golden Corner Commen infrastructure	F&E (35,238 sq. ft)	\$ 9,100,000	G.O. Bonds
Pave South Cove parks gravel roads an roads Phase 2, and 3 Golden Corner Commen infrastructure	and aluminum	\$ 375,000	G.O. Bonds
roads Phase 2, and 3 Golden Corner Commen infrastructure		\$ 5,000,000	G.O. Bonds
infrastructure	d overlay paved	\$ 142,000	G.O. Bonds
2010 Addition/Renovation at Seneca High S	ce Park	Phase 2 - \$ 1,350,000 Phase 3 - \$290,000	G.O. Bonds/ ED Millage
5	chool	\$ 5,000,000	G.O. Bonds
2010 Addition/Renovation at West Oak High	n School	\$ 5,000,000	G.O. Bonds

	5-Year Funding Timeframe		
	Video imaging	\$185,000	G.O. Bonds
	Update Morgue Facility & Equipment	\$250,000	G.O. Bonds
	Phase 4 Golden Corner Commerce Park Infrastructure	\$655,000	G.O. Bonds/ ED Millage
	Speculative Building in Commerce Park	\$400,000 (plus proceeds from prior spec building)	G.O. Bonds/ ED Millage
	Phase 5 Golden Corner Commerce Park Infrastructure	\$975,000	G.O. Bonds/ ED Millage
	Upgrade Wastewater treatment facility for I-85 region	\$4,000,000	G.O. Bonds/ ED Millage
	8,000 sq. ft. Office Facility in Geographical Center of the County	\$1,800,000	G.O. Bonds/ ED Millage
	Develop and Construct Exit 3 in I-85 region	\$5,000,000	G.O. Bonds/ ED Millage
	South County Library, with FF&E	\$2,000,000	G.O. Bonds
	Renovate Library in Walhalla, with FF&E	\$1,750,000	G.O. Bonds
	Replace Bookmobile	\$250,000	G.O. Bonds
	ADA Bathhouse-campground for Chau Ram Park	\$180,000	G.O. Bonds
	Renovate campsites for High Falls Park (2 phases)	\$300,000	G.O. Bonds
	New office, store, visitor center with maintenance shop at South Cove Park	\$230,000	G.O. Bonds
	Dyar Bridge	\$1,400,000	G.O. Bonds/ Bridge Millage
	Lands Bridge	\$400,000	G.O. Bonds/ Bridge Millage
	Jenkins Bridge	\$300,000	G.O. Bonds/ ED Millage
	Mauldin Mill Road Culvert	\$250,000	G.O. Bonds/ Bridge Millage
	Purchase land adjoining Rock Quarry as it become available	\$275,000	G.O. Bonds
	Rubber tired front end pit loader for Rock Quarry	\$950,000	G.O. Bonds
	Purchase properties surrounding land fill as they become available	\$1,500,000	G.O. Bonds
2013	New Walhalla High School	\$40 – 50 million	G.O. Bonds
2013	Addition/Renovation at Tamassee-Salem Middle & High School	\$3 – 4 million	G.O. Bonds
	10-Year Funding Timeframe		
	Oblique aerial photography reflight	\$165,000	G.O. Bonds

Video imaging (buildings)	\$185,000	G.O. Bonds
Update Morgue facility and equipment	\$250,000	G.O. Bonds
Purchase right-of-way extension of Commerce Way in	\$1,000,000	G.O. Bonds/
OCCC	\$1,000,000	ED Millage
Extend Commerce Way to Armstrong Road	\$1,200,000	G.O. Bonds/
	1 7 - 7	ED Millage
Purchase additional acreage for OCCC	\$1,500,000	G.O. Bonds/ ED Millage
Business incubator/training center- partner with Tri-	\$3,000,000	G.O. Bonds/
County Technical College		ED Millage
Build a speculative building	\$400,000 (plus proceeds from prior spec building)	G.O. Bonds/ ED Millage
Build an additional speculative building	\$600,000 (plus proceeds from prior spec building)	G.O. Bonds/ ED Millage
New Superintendents House for Chau Ram	\$120,000	G.O. Bonds
New bath house facility in South Cove campground	\$220,000	G.O. Bonds
Replace fishing pier at South Cove	Cost TBD	G.O. Bonds
Camp Road culvert	\$250,000	G.O. Bonds/ Bridge/ Millage
McGee Bridge culvert	\$400,000	G.O. Bonds/ Bridge Millage
Lusk Road bridge	\$250,000	G.O. Bonds/ Bridge Millage
Lonely Road bridge	\$250,000	G.O. Bonds/ Bridge Millage
Nectarine Circle bridge	\$250,000	G.O. Bonds/ Bridge Millage
Conley Road bridge	\$250,000	G.O. Bonds/ Bridge Millage
Land adjacent to Rock Quarry as available	\$275,000	G.O. Bonds
Upgrade or replace 1 Manned Convenience Center in high growth areas	\$750,000	G.O. Bonds
Complete original Transfer Station Plan to meet with higher garbage volumes	\$1,000,000	G.O. Bonds
In-house tax software for tax center	Cost TBD	G.O. Bonds
Projected Capital Expenditures - County	\$86,421,000	
Projected Capital Expenditures - Schools	\$64,000,000	
Total Projected Capital Expenditures	\$150,421,000	

\*All costs are based on best information available

\*\*While grants and other one-time funds may be used for part or all of the required funding, Potential Funding Sources identified in the chart only include those sources considered steady

# OCONEE COUNTY PLANNING COMMISSION

415 South Pine Street - Walhalla, SC



TEL (864) 638-4218 FAX (864) 638-4168

# Oconee County Roadway Collision and Fatality Research

Prepared for the Oconee County Planning Commission by the Oconee County Community Development Department

January 2018

# Accidents don't just happen. They are caused.

## Special thanks to :

Lisa Simmering - Oconee County GIS

Karl Addis - Oconee County Coroner

Kenneth Long Jr. - South Carolina Department of Protective Services

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# DIRECTIVES

n April 24th, 2017 Oconee County Council directed the Planning Commission to discuss and create a plan for Corridor Planning . The topics of consideration regarding the Corridors were traffic flow, signage, pedestrian friendly areas and shading parking lots. After a joint County Council & Planning Commission on October 24th, 2017 the Council instructed Planning Commission to focus on mitigating traffic and roadway safety. Other priorities were the creation of secondary routes for traffic. Other issues that could be looked at were design and sign standards. On December 18th, 2017 the Planning Commission tasked the Planning and Zoning Department to create a baseline of facts and statistics regarding identified Corridors within Oconee County. This document is the deliverable.

# **EXECUTIVE SUMMARY**

The act of driving, being a passenger or being on the roadway as a pedestrian in Oconee County has been fatal for over 400 people in the last 24 years. Between 2012 and 2017 there were almost 8,000 collisions that resulted in 81 fatalities and over 3,000 injuries. Highways 123/76, 11 and 28 are the highways with the highest incidents of total collisions. Highways 123/76, 11 and 130 are the County's most fatal roadways. Driving under the influence and driving too fast for the conditions are the top causes of fatal wrecks in the County. Driving too fast for the conditions and failure to yield the right-of-way are the top causes of all collisions within the County. Driving to fast for conditions and driving under the influence are conditions which may be reduced utilizing a multidepartment, multi-agency approach with short, medium and long range plans and goals.

# **ROAD FATALITIES: NATIONALLY**

he National Highway Traffic Safety Administration (NHTSA) numbers, from 2015, indicate that drivers involved in accidents on rural roads are more likely to die then their urban counter-parts. There are a number of factors from seat-belt use and alcohol consumption to time-of-day and speeding that are found in higher rates in rural crashes<sup>1</sup>. According to a NHTSA study ", the total value of societal harm from motor vehicle crashes in 2015 was \$836 billion"<sup>2</sup>.

#### NHTSA Quick Facts

- In 2015 there were 32,166 fatal crashes that resulted in 35,092 traffic fatalities, nationally. That is four deaths every hour.
- Of the 35,092 fatalities 17,114 were in rural areas.
- 19% of the U.S. population lives in rural areas but rural fatalities accounted for 49% of all traffic fatalities in 2015.

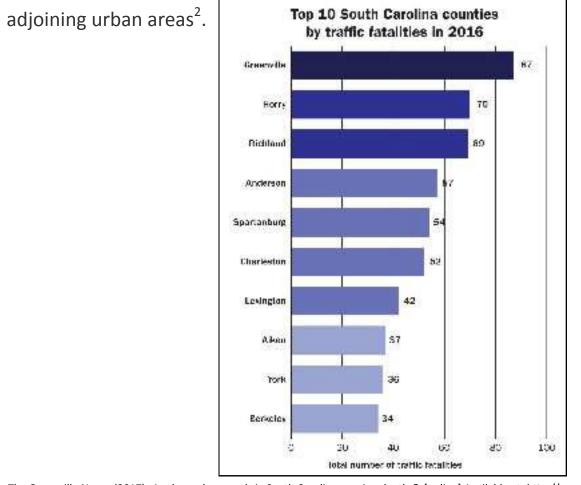
1.SOURCE : Geospatial Analysis of Rural Motor Vehicle Traffic Fatalities . NHTSA. Document DOT HS 811 196

2. DOT HS 812 013 2. Government Accession No. 3. Recipient's Catalog No. 4. Title and Subtitle The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (Revised) 5. Report May 2015

# **ROAD FATALITIES: SOUTH CAROLINA**

n 2015, South Carolina had the highest fatality rate in the nation for miles traveled. It was 53 percent higher than the national average, according to a series of articles by the Greenville Sun. There has been almost a 27 percent increase in road deaths in the past three years , from 2014-2016<sup>1</sup>.

In South Carolina there is a significant difference in the percentages of overall fatalities that occur in urban areas and the percentages, when immediate rural areas are also included. Highway safety planners seeking to reduce rural fatalities in these States should concentrate their resources in the rural areas



1: The Greenville News. (2017). Are hazardous roads in South Carolina causing deaths?. [online] Available at: http://www.greenvilleonline.com/ story/news/2017/03/04/south-carolina-roads/97909854/ [Accessed 21 Dec. 2017].



# **OCONEE COUNTY COLLISIONS AND FATALITIES:**

# **BY THE NUMBERS**



# SUMMARY OF COLLISIONS AND FATALITIES IN OCONEE COUNTY 2012-2017

The table below highlights the damage to both people and property that collisions caused in Oconee County from 2012-2017. Almost 28% of all collisions result in injuries with almost 1% of all collisions resulting in fatalities. 2012 saw the most deaths in a single year for this timeframe with 22 persons killed. Over 3,000 people have been injured in this time frame with 2016 being the most injurious year with 626 persons injured.

Oconee Cou	unty Collisio	ns 2012-202	17 : Summa	ry by Year		
Year	Fatal Collision	Injury Collision	Property Damage Only Collision	Total Collisions	Persons Killed	Persons Injured
2012	21	356	884	1,261	22	525
2013	3	343	908	1,254	3	463
2014	11	347	852	1,210	13	481
2015	13	352	1,046	1,411	13	498
2016	11	434	997	1,442	11	626
2017	17	335	961	1,313	19	494
TOTALS	76	2167	5648	7891	81	3087

1. S.C. Department of Protective Services (SCDPS)

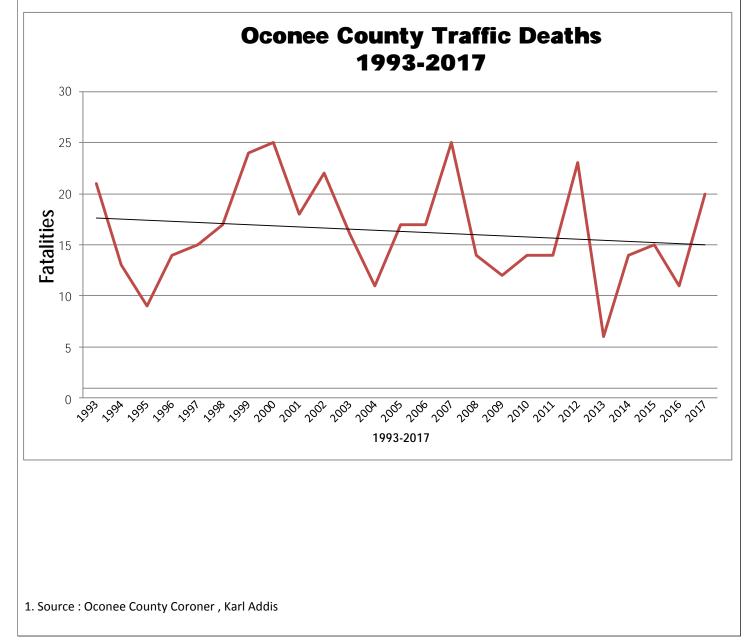
Collisions 2012

6

# **ROAD FATALITIES: OCONEE COUNTY**



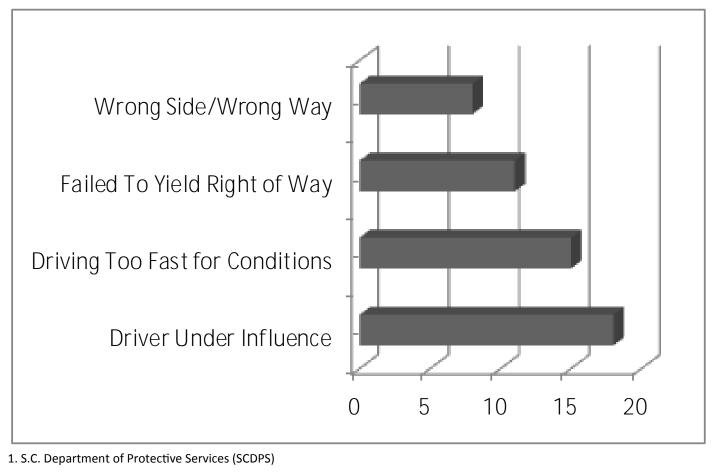
etween 1993 and 2017, 407 people have lost their lives roads within Oconee County. The decreasing number of deaths per year is promising as the trend-line indicates <sup>1</sup>. Between 2012 and 2017, 81 people have been killed in collisions in Oconee County.



# Top 5 reasons for Fatal Collisions in Oconee County 2012-2017

The five year time period of 2012-2017 was chosen to model the current statics on based upon the most complete data sets available in a timely manner. Of the 81 people who were killed in roadway accidents in the 2012-2017 time frame , 25% were due to the driver being under the influence of drugs or alcohol. Driving to fast for the conditions accounted for 21% of the fatalities. Failure to yield right-of-way was 15% of the fatalities and driving on the wrong-side of the road accounted for 11% of the fatalities

# Number and Cause of the five most lethal actions on Oconee County Roadways. 2012-2017.



# ALL REASONS OF FATAL COLLISIONS IN OCONEE COUNTY

## 2012-2017

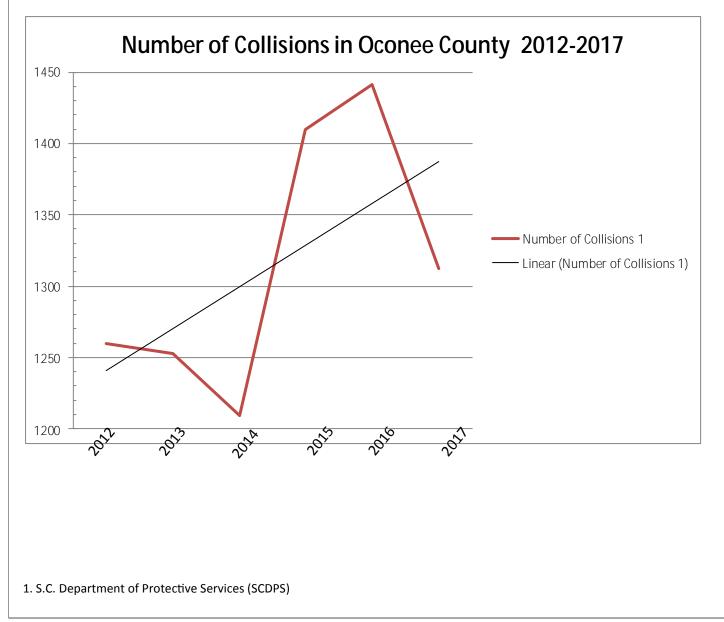
18
15
11
8
3
2
2
2
2
2
2
2
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2
2
2
2
1
1

1. S.C. Department of Protective Services (SCDPS)

# **ROAD COLLISIONS IN OCONEE COUNTY**

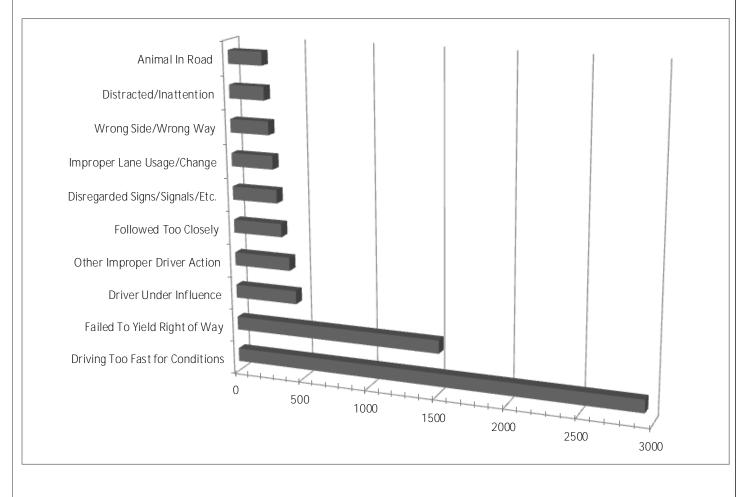
# 2012-2017

Between 2012 and 2017 there have been 7,891 collisions in Oconee County. The range of collision is fairly narrow , at only 232 collision difference between the lowest year , 2014, and the highest year , 2016. The trend line for this timeframe is showing an overall increase in the number of collisions. Less than 1% of the time are collisions fatal in Oconee County based upon the data from 2012-2017.



# TOP 10 REASONS FOR ROAD COLLISIONS IN OCONEE COUNTY 2012-2017

Of all the collisions from 2012-2017 there were 51 independent causative factors recorded. Driving too fast for the road conditions makes up 37% of all the accidents. Failure to yield right-of-way accounted for 19% of all collisions. Those two causes account for 56% of all the collisions the county has seen from 2012-2017. The other 8 of the top 10 reasons for road collisions in Oconee County account for approximately 36% of all the collisions.



## Top 10 reasons of collisions in Oconee County from 2012-2017

1. S.C. Department of Protective Services (SCDPS)

### ALL REASONS FOR ROAD COLLISIONS IN OCONEE COUNTY

#### 2012-2017

2946
1519
462
418
363
335
311
287
261
252
141
129
77
73
36
34
29
27
20
17
14
13
13
10
10

Vision Obscured (Within Unit)10Lying &/Or Illegally In Roadway9Non-Motorist Failed To Yield ROW8Other Environmental Factor7Power Plant7Steering7Lights5Road Surface Condition (i.e. Wet)5Truck Coupling5Improper Crossing3Obstruction3On Cell Phone3
Non-Motorist Failed To Yield ROW8Other Environmental Factor7Power Plant7Steering7Lights5Road Surface Condition (i.e. Wet)5Truck Coupling5Improper Crossing3Obstruction3
Other Environmental Factor7Power Plant7Steering7Lights5Road Surface Condition (i.e. Wet)5Truck Coupling5Improper Crossing3Obstruction3
Power Plant7Steering7Lights5Road Surface Condition (i.e. Wet)5Truck Coupling5Improper Crossing3Obstruction3
Steering7Lights5Road Surface Condition (i.e. Wet)5Truck Coupling5Improper Crossing3Obstruction3
Lights5Road Surface Condition (i.e. Wet)5Truck Coupling5Improper Crossing3Obstruction3
Road Surface Condition (i.e. Wet)5Truck Coupling5Improper Crossing3Obstruction3
Truck Coupling5Improper Crossing3Obstruction3
Improper Crossing3Obstruction3
Obstruction 3
On Cell Phone 3
Other Vehicle Defect 3
Glare 2
Non-Motorist Inattentive 2
Not Visible (Dark Clothing) 2
Other Person Under Influence 2
Other Roadway Factor 2
Work Zone (Constr/Maintenance/Util) 2
Darting 1
Non-Motorist Wrong Side Of Road 1
Other Non-Motorist Factor 1
Texting 1
Unknown Environmental Factor 1
Unknown Vehicle Defect 1
Windows/Windshield 1

#### **COLLISION LOCATIONS**

By the numbers, US76/123 has the most collisions. S.C. Highway 11 is the most deadly and most injury causing roadway. US76/123 had 1,937 collisions total with 10 total fatalities which is 0.55% fatality rate. Highway 11 had 401 collisions with 14 fatalities which is 3.5% fatality rate. S.C. 28 had the second most collisions with 553. S.C. 130 and S.C. 24 are the next two most lethal highways in the County.

#### 2012-2017 Top 15 Roadways for collisions in Oconee County

Roadway	Fatal Collision	Injury Collision	Property Damage Only	Total Collisions	Persons Killed	Persons Injured
US Primary-76	9	447	1,337	1,793	10	644
SC Primary-28	5	133	415	553	5	180
SC Primary-11	12	118	271	401	14	195
SC Primary-130	8	101	251	360	8	160
Secondary-488	2	82	218	302	3	127
SC Primary-59	3	91	198	292	3	141
SC Primary-183	4	59	215	278	4	88
SC Primary-24	5	77	183	265	6	126
Interstate-85	3	31	175	209	3	52
Secondary-37	4	55	130	189	4	69
Secondary-21	2	48	95	145	2	67
US Primary-123	0	42	102	144	0	61
Secondary-50	0	29	83	112	0	39
Secondary-135	0	27	79	106	0	40
SC Primary-188	0	24	80	104	0	30

1. S.C. Department of Protective Services (SCDPS)

