

Economic Health

Environment



Land Use and Livability

Health, Culture and Equity

This page intentionally left blank



COMPREHENSIVE PLAN

Page

Table of Contents

Acknowledgements	ii
Vision Statement	
Introduction	
Background	
Community Locations	
Public Participation	
Focus Areas	
Transylvania County Overview	4
Regional Context	4
Demographics	
Development Patterns—Case Study	
Population Growth and Projections	7-8
Focus Area 1: Economic Health Assessment	9-12
Infrastructure	
Transportation: (roads, airports, railroads, public	
transportation, bicycles	
Utilities (water, sewer, stormwater, trash)	
Communication (internet, wireless signal availabil	lity)17
Goal, Objectives and Action Steps	
Focus Area 2: Environmental Health Assessment	20
Forest Resources	2
Water Resources	2
Agricultural Resources	22
Flora and Fauna Biodiversity	23
Goal, Objectives and Action Steps	24-2

	Page
Focus Area 3: Land Use and Livability Assessment	26
Land Development	
Floodplain	
Public Safety	
Zoning	
Housing	
Public Concern over Land Use	
Land Use	
Goal, Objectives and Action Steps	31-33
Focus Area 4: Health, Culture and Equity Assessment	
Health Care	
Education	
Diversity	
Arts and Culture	
Recreation	
Goal, Objectives and Action Steps	
References	

Dee

i

Appendices:

Appendix A: Definitions Appendix B: Comprehensive Plan Examples Appendix C: Survey Report and Review Appendix D: Community Meetings Report Appendix E: Success Matrix Appendix F: Partners, Related Efforts and Other Resources

List of Figures:

ii

Figure 1: 2025 Comprehensive Plan Process	1
Figure 2: April 28th Community Event Feedback on Assets	
Figure 3: Additional Community Event Feedback on Vision	
Figure 4: Regional Population Change with Growth Projections	
Figure 5: Transylvania County Age Distribution 1980-2010	
Figure 6: Transylvania County and NC Age Distributions	
Figure 7: Transylvania County Population and Projected Growth	
Figure 8: 2025 Survey Question 8	8
Figure 9: 2025 Survey Question 12	<u>c</u>
Figure 10: 10-year Change in Income Source for TC	10
Figure 11: Unemployment History in Transylvania County	
Figure 12: Transylvania County Residential Building Permits	10
Figure 13: Peer County Comparison of Median Household Income	11
Figure 14: Transylvania County's Major Employment Sectors	11
Figure 15: Landfill Waste	16
Figure 16: Recycling	16
Figure 17: 2025 Survey Question 16	
Figure 18: 2025 Survey Question 18	19
Figure 19: Transylvania County Agricultural Land Uses	
Figure 20: 2025 Survey Question 10	
Figure 21: 2025 Survey Question 21, Agricultural Prioritization	
Figure 22: Transylvania County Land Uses	
Figure 23: Transylvania County Zoning	
Figure 24: 2025 Survey Question 15	
Figure 25: 2025 Survey Question 13	
Figure 26: 2025 Survey Question 14	
Figure 27: 2010 Census Housing Data	
Figure 28: 2025 Survey Question 11	
Figure 29: Transylvania County Non-Profit Organizations	34
Figure 30: Cost of Childhood Education Compared to Public	
College Tuition	
Figure 31: Students Served by Transylvania County Schools	36
Figure 32: 2010 General Population Compared to the 2015-2016	
School Population	
Figure 33: Parks and Recreation Facilities that are Most Important.	
Figure 34: 2025 Survey Question 19.	
Figure 35: Percent of Newly Enrolled Kindergarten Students Who:	41

List of Maps:

Page

Map 1: Transylvania County Regional Location	4
Map 2: Existing Structures in Transylvania County from	
Different Times	6
Map 3: Transylvania County Roads	12
Map 4: Transylvania County Bicycle Routes and Railroad	13
Map 5: Transylvania County Water Supply and Service	14
Map 6: Wastewater Services in Transylvania County	15
Map 7: Telecommunication Towers and County Landfill	17
Map 8: Transylvania County Managed Lands	21
Map 9: Transylvania County Biodiversity	23
Map 10: Transylvania County Land with Restrictions	27
Map 11: Designated Growth Areas and Commercial Nodes	30
Map 12: Transylvania County Emergency Services	32
Map 13: Transylvania County Community Centers	33

List of Tables:

		2
n Projection	s	7

Page

Page

Table 1: Public Participation	2
Table 2: Transylvania County Population Projections	7
Table 3: Conserved Lands in Transylvania County	20
Table 4: Examples of Federally Listed Animals and Mussels	23
Table 5: Transylvania County 2014 Health Behaviors	35
Table 6: Transylvania County 2014 Physical Environment	35
Table 7: Event-Related Spending	37



Acknowledgements

County Commissioners:

- Larry Chapman, Chair
- Jason Chappell
- Mike Hawkins
- Page Lemel, Vice Chair
- Kelvin Phillips

Planning Board:

- Michael West, Chair
- Wayne Hennie, Vice Chair
- Maureen Copelof
- Daryle Hogsed
- Kris Hovey
- Mack McNeely
- Jackie Whitmire

Transylvania County Staff:

- Jaime Laughter, County Manager
- Mark Burrows, Planning and Community
 Development Director
- Joy Fields, County Planner
- Kalen Lawson, Program Assistant



Pictured left to right: Jason Chappell, Kelvin Phillips, Page Lemel (Vice Chair), Larry Chapman (Chair), and Mike Hawkins



Approved by the Planning Board August 18, 2016

Approved by the

March 27, 2017

County Commissioners

Pictured left to right: Kris Hovey, Maureen Copelof, Wayne Hennie (Vice Chair), Michael West (Chair), Jackie Whitmire, Daryle Hogsed, and Mack McNeely

Special Thanks to:

- Community Advocates
- The Transylvania Times
- Dan Moore, Brevard College
- Mark Tooley (previous planning board member)
- April Alm, previous Program Assistant
- Chris Hnatin, previous County Planner
- Brian Burgess, Planning Department Intern



2025 Comprehensive Plan – Process Vision Statement Through leadership and community engagement, Tran- Review the 2005 Comprehensive Plan sylvania County preserves the county's natural beauty Review comprehensive plan examples and cultural resources while developing our built envi- Create work plan and schedule Project Develop marketing and branding Planning ronment to improve the economic, social and cultural **Planning Board** conditions of our county. and Staff Select Community Advocates Identify opportunities and challenges Determine subjects and their key indicators Community Create historical snapshot Assessment Introduction: A comprehensive plan is a long-range guide that typically Develop/issue survey and prepare survey report identifies Hold visioning meeting Host community meetings and events existing social, economic and land use conditions; Identify further opportunities and challenges Public Participatior future growth and development patterns based on Participation these existing conditions; & community needs and desires through proactive en-Community gagement and listening; and Determine vision and focus areas Advocates Prepare goals and strategies for each focus area a broad vision for the county's future with specific Action Plan goals and action steps that, upon implementation, will help achieve the stated vision. The comprehensive plan is designed to be a guide for poli- Present draft plan to County Commissioners cy and development decisions over the next 10 years and Receive public comment Revise plan serves as a tool for sharing Transylvania County's vision Refine Plan Submit plan for adoption by County Commissioners with others. Importantly, no regulations are set forth in the 2025 Comprehensive Plan. A comprehensive plan focuses on the built environment, County Implement plan but is comprehensive in nature since all aspects of com-Commissioners Measure, evaluate and report success munity life from health to economic development are in- Update plan Implement fluenced by land use.

Figure 1, Source: Transylvania County Planning and Community Development Department

٠

•

Background: In 2014, the Transylvania County Planning and Community Development staff met with the Planning Board and began a process of creating the 2025 Transylvania County Comprehensive Plan. The Planning Board and staff spent nearly six months reviewing comprehensive plans from small and large jurisdictions across the region, state and country (Appendix B). During their meetings, a tremendous amount of time and energy was spent identifying key elements and processes from the other plans that board members liked and wanted to incorporate into the county's new plan (Figure 1). Plans that seemed to have the greatest appeal were those that engaged citizens at a variety of levels.

To accomplish this, the board and staff created a broad coalition of "**community advocates**," some of whom were identified by the Planning Board and some who volunteered to help after seeing multiple advertisements in *The Transylvania Times*. County staff developed a website that was used to communicate current events and activities, as well as to share relevant planning updates. As a follow-up to this, the Planning Board requested that staff develop a Survey Monkey questionnaire that would engage citizens and better identify 1) their current thoughts about the county, 2) what they want Transylvania County to look and feel like in 2025, and 3) what is needed to ensure the Comprehensive Plan is a success (Appendix C). To help market the questionnaire, a video was created and the Planning Board, staff and community advocates facilitated or attended 33 different events located throughout the county (Table 1).

Community Locations: A public meeting was held in each community area to obtain input from all reaches of the county. While the US Census has delineated townships within the county, they do not reflect how the citizens view their community. For instance, the Hogback Township includes Lake Toxaway, Sapphire-Whitewater and Quebec, and the residents from Lake Toxaway are more likely to refer to their community as Lake Toxaway rather than Hogback Township. Even if grouped together in a census township, each of the communities within the county has a unique identity and efforts were made to engage them all (Appendix D). **Public Participation:** Citizen input was imperative for developing a meaningful comprehensive plan. There were 2,113 citizen surveys completed along with an additional 1,479 points of contact where additional input was received (Figure 2, Figure 3 and Table 1).

Type of Public Participation	Dates	Number of Participants
Community center meetings (15)	May - July 2015	200
Invitational meetings (3)	May - June 2015	28
Special events (9)	May - July 2015	590
Door-to-door canvasses (4)	July - July 2015	308
Community advocate meetings (6)	January 2015- February, 2016	353
Surveys completed	January - November	2,113
Total public participation		3,592

Table 1, Source: Transylvania County Planning and Community Development Department

April 28th Community Event Feedback on Assets

Participants were asked several questions at a facilitated visioning meeting that started the development of the 2015 Comprehensive Plan, including, "What are the county's most important assets (to you) to be supported, maintained, and/or enhanced? Name three assets."



Focus Areas: Working with the Community Advocates, the Planning Board, with public input, identified the following four basic focus areas for the 2025 Comprehensive Plan:

Economic Health

- Population and economic trends
- Transportation needs
- Utilities: water, wastewater, stormwater and solid waste

• Communication: internet and wireless signals Environment Health

- Forests
- Water quality
- Agriculture
- Flora and fauna biodiversity

Land Use and Livability

- Land development
- Floodplain
- Public safety
- Zoning/ordinances
- Housing needs

Health, Culture and Equity

- Public health (physical, dental, mental wellness)
- Education
- Diversity (geographic and racial)
- Arts and culture
- Recreation

From this information the Planning board identified four focus areas and related goals, objectives and action steps. Planning Board members easily reached consensus on many of these goals and action steps. Other areas were more difficult and reflected the diversity of personal beliefs and thoughts about what the county should look like by 2025.

These differences are reflected by the varying comments and concerns expressed by citizens throughout the county (Figure 3). While not unique to Transylvania County, many of the current national and state level concerns are most evident at the local level. Without exception, all Planning Board members believe that the solutions to many of these problems can be addressed at the local level with realistic goals, objectives and action steps that are implemented over time. As the Planning board developed objectives and action steps they wanted to distinguish between those actions currently in progress that should continue and future activities that the county should consider in the next ten years. The action steps identified by the Planning Board will be integrated into the annual work plan to assist Transylvania County Departments in implementing the 2025 Comprehensive Plan and the Board of Commissioners' Strategic Plan (Appendix E). In addition to county departments, a list of partners, related efforts and other resources to implement this plan are included in Appendix F.

Additional Community Event Feedback on Vision

Participants were asked:

Imagine you are in Transylvania County 10 years from now. The county is exactly as you have scripted it to be 10 years ago and you are now living in this county. If you were to stop and take a photograph of it as it is in this future place, what do you see in the picture?

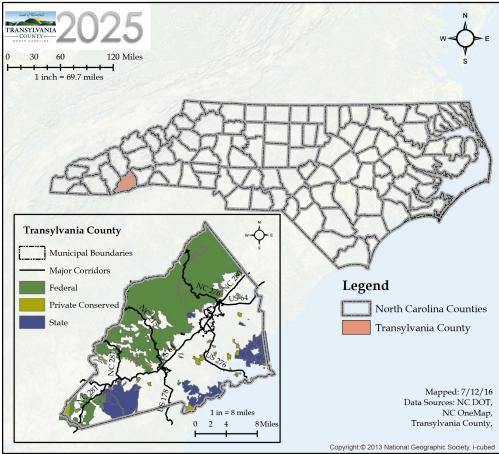


Regional Population Change with Growth Projections

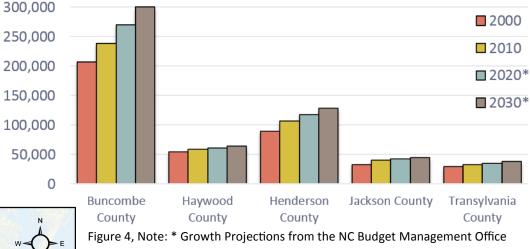
Transylvania County Overview

Growth patterns, including population and demographics, influence the type and appropriateness of different economic strategies, neighborhood and community structures, transportation patterns, infrastructure needs and cultural resources. Planning for anticipated changes will help us meet the needs of future generations through land use strategies.

Map 1: Regional Location



(Does not include seasonal residents)



Source: Census.gov and the NC Budget Management Office

Regional Context: Transylvania County is located in the mountains of Western North Carolina. The rural county has a small town atmosphere and enjoys the cultural resources that come from the renowned Brevard Music Center and Brevard College. Additionally, the highway system connects the county to Interstates 40 and 26 and to metropolitan areas such as Asheville, Hendersonville, and Greenville, SC, which are all within an hour's drive (Map 1).

As the world has shifted to a global economy, regions have begun to shift to a regional economy where many rural and urban residents commute to work across county and state boundaries. In this context growth in Asheville and Buncombe County are seen as major regional drivers. Therefore, the population (Figure 4), employment data, housing availability and quality of life for the entire region must be considered when determining how the land in Transylvania County will be developed and used. **Demographics:** The 55 and up age group is the population sector that has grown the fastest over the last 30 years. With the increase in the older population, the median age of the county has increased from 32 years old in 1980 to 48.8 years old in 2010 (US Census) (Figure 5). In 2010 the 55 years and older population accounted for 41% of the population of Transylvania County but only 25% of North Carolina's population (Figure 6). This trend is also reflected in the USDA designation of Transylvania County as a retirement destination (<u>USDA Economic Types 2015</u>).

While not growing nearly as fast as the older age groups, the school aged group of 5-17 year olds has seen an 8% growth rate in the last thirty years. Additionally, the 18-54 year old age group experienced a 9% growth rate over the last thirty years. The only age group that did not see growth was the 0-4 year old group which stayed stable (<u>US Census</u>).

Transylvania County Age Distribution 1980-2010

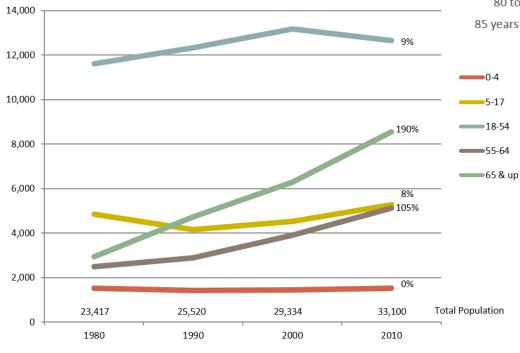
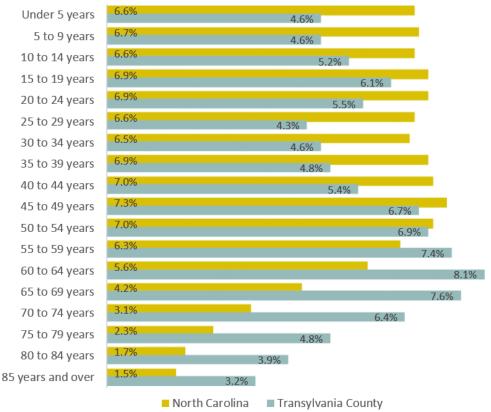


Figure 5, Source: Census.gov

Transylvania County and NC Age Distribution Comparison

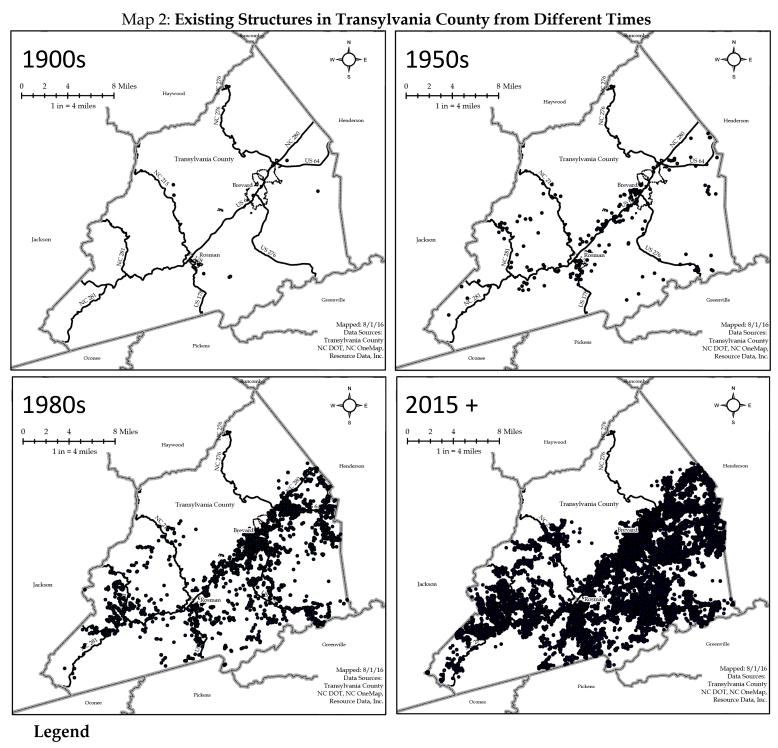




While the retirement age population is a large percentage of the total population, Transylvania County has to continue planning for all age groups to ensure that there are ample recreational, educational and health related facilities for all residents. One of the concepts that the Planning Board and community advocates discussed is similar to the <u>8-80 Cities</u> movement where the community focuses on ways to improve the built environment for those individuals that are 8 and under and 80 and older and by doing so, create a more vibrant, healthy, and equitable community that can accommodate everyone.

Development Patterns – Case

Study: Buildings and structures built to serve a community are a good way to view how a population grows and changes over time (Map 2). For instance if you look at the structures that are still standing from the 1900s, the buildings are clustered in Rosman with a few scattered communities in the Balsam Grove, Dunn's Rock, Cathey's Creek, Brevard and Little River areas. As the County develops those clusters grow and spread out along the roads and river valleys. In 2016 the influence of state and federal land is seen in the large expanses of white space where development is restricted by those entities.



County Boundary — Major Corridors Municipal Boundaries • Buildings

Did You Know?

When you consider the amount of land that is already developed, publicly owned, in the floodplain, or with slopes over 25%, it is estimated that there is less than 20% of the county that can be developed (Figure 22 and Map 2 and 10). Therefore, how that land is used will determine Transylvania County's future. 50,000

Population Growth and Projections: In 2010 the US Census population for Transylvania County was 33,090. Over the past 50 years, the county's US Census population growth rate has fluctuated from as little as 0.78% per year to as much as 2.04% per year. The average annual growth rate is close to 1.39% per year (Figure 7).

As the County begins to plan for the future and ensure that adequate services are provided to citizens, it's important to think about what the future population may look like. Looking to the future (Table 2), the County's projected 2020 total population

Transylvania County Population Projections Assumption base population from 2010 = 33,090

Planning Growth Model	% Change 2010- 2020	2020 Total Projected Population	% Change 2020-2030	2030 Population Scenarios
			10%	40,039
Low	10%	36,399	15%	41,859
			20%	43,679
			10%	41,859
Moderate	15%	38,054	15%	43,762
			20%	45,665
			10%	43,679
High	20%	39,708	15%	45,664
			20%	47,650

Transylvania County Population and Projected Growth

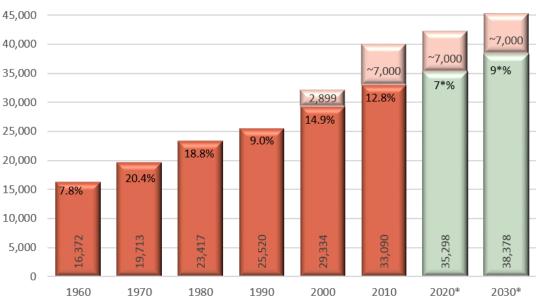


Figure 7, Note:~ Includes the "seasonal population" calculated using Census data on seasonal households and the average size of Transylvania County households. Seasonal population is estimated to stay the same for 2020 and 2030. *<u>NC Budget Management</u> Office Projections, Source: NC Budget Management Office, <u>Census.gov</u>

could range from a low of 36,399 individuals to as many as 39,708 using straight-line growth projections of 10% (low growth) 15% (moderate growth) and 20% (high growth). Extending these projections out to the year 2030 the growth projections could range from a low of 40,039 to a high of 47,650 citizens.

The challenge for the County is that the US Census population *underestimates* the number of individuals at any given time that may need county services or are using the state maintained roads. This is most evident during the summer months and again in the fall and spring as tourist, seasonal residents and campers all visit the county. The county's Planning and Community Development Department estimates that, based on the number of seasonal residences and local camps, the peak population increases by over 7,000 individuals during the peak tourist times (Figure 7).

Table 2, Source: Transylvania County Planning Department

From an economic development perspective, this peak population increase is great and is one of the reasons that the county, and particularly the City of Brevard, has fared so well over the past ten years. At the same time, this increase places additional burdens on many of the services that the county provides including law enforcement, recreation, planning and solid waste. The 2025 Comprehensive Plan Survey (Figure 8) reflects the concerns of our citizens regarding these growth trends.

While projecting the county's future population growth is difficult, the general consensus is that Western North Carolina will continue to be attractive for many individuals due to the natural environment, lower taxes relative to other states and communities, strong schools, and historically low crime rates. Planning for greater growth will help ensure that the county continues to be a place that is responsive to the needs of our citizens whether they are retirees, entrepreneurs starting a business in the county or commuting to other areas in the region for work.

2025 Survey Q8: How would you characterize the rate of growth in Transylvania County today?

2,005 comments categorized:

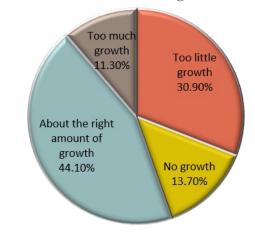


Figure 8, Source: 2025 Comprehensive Plan Survey Data



Focus Area 1: Economic Health

Economic Assessment

Concerns and questions about Transylvania County's future economic development was the number one issue that Planning Board members and staff heard during the public input sessions conducted throughout the county and the number one item identified in the 2025 Comprehensive Plan Survey (Figure 9).

By reviewing the county's recent economic and demographic history and current trends, the county can make better informed decisions on how to support future growth that will help our businesses and citizens. The following are key economic points to consider:

- The county's overall economy is resilient and continues to improve particularly as a small rural county.
- Many in our county still focus on the loss of Ecusta, DuPont and Coats America.
- Income disparity continues to widen.
- While tourism and outdoor related businesses have grown, many of the county's smaller manufacturers also experienced growth during the recent recession.
- Our population is one of the oldest in North Carolina, but steadily continues to grow.
- Transylvania County is part of a dynamic region that is dominated by the City of Asheville and Buncombe County.
- The development of the former Ecusta site has potential to dramatically impact on the economic health.

2025 Survey Q12: What would you like to see changed in the county? 1,947 comments categorized:

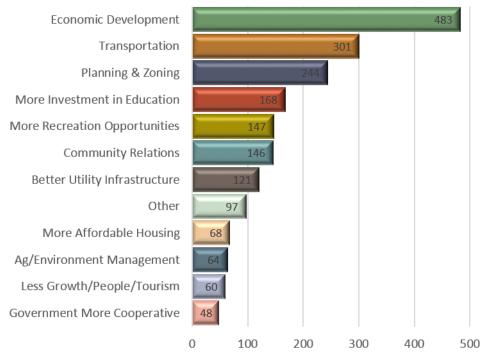


Figure 9, Source: 2025 Comprehensive Plan Survey Data

The closure of Ecusta, DuPont and Coats America in 2002 resulted in the loss of over 2,200 manufactured jobs. While similar losses were replicated across North Carolina and the United States as global economic changes reshaped our economy, the loss was particular severe to Transylvania County as many workers were forced to take early retirement or find work that paid less, or had fewer benefits. This trend can be seen in Figure 10 relative to a 10-year change in income for Transylvania County. Between 2003 and 2013 Personal Government transfers (those on public assistance or social security) rose while earnings decreased (Figure 10). Unemployment trends (Figure 11) also show a dramatic change in the total number of people seeking work immediate following the loss of these major manufacturers.

After the loss of the major manufacturers, income disparity grew between working families and retirees. Although the median household income, which includes retirement income, is the second highest when compared to the peer counties identified by the County Commissioners, the weekly wage is the third lowest when compared to the same counties (Figure 12). The impact of low weekly wages is most visible in the 0-18 year old population which has 24.9% who live below the poverty level and where over 50% of students in the school system qualifying for free or reduced price lunches (American Fact Finder Poverty Status 2010-2014, NC DPI Title I schools 2015-2016, http://www.dpi.state.nc.us/fbs/resources/data/).

Unemployment History in Transylvania County

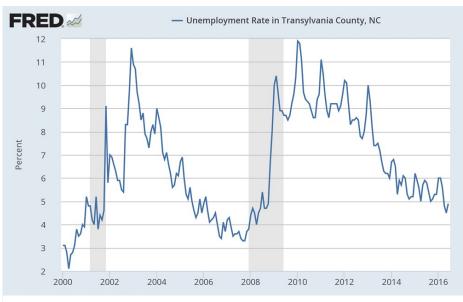
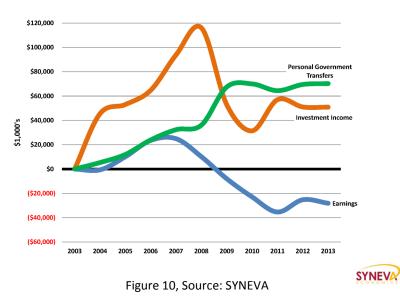


Figure 11, Source: US. Bureau of Labor Statistics from fred.stlouisfed.org

10-Year Change in Income Source for Transylvania County

Adjusted for Inflation



Peer County Comparison of Median Household Income and Weekly Wage

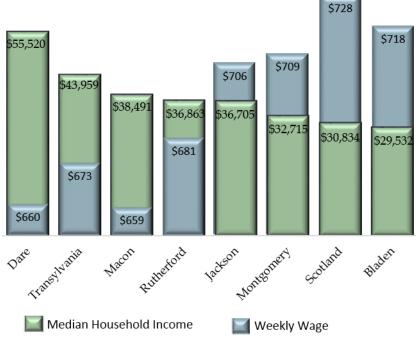


Figure 12, Note: Data in 2014 dollars for years 2010-2014, * Weekly wage is for the 4th quarter of 2015. Source: US Census Bureau

Transylvania County and the City of Brevard weathered the 2002 economic storm well with a significant surge in residential construction and a greater emphasis on retirement, tourism and outdoor sports recreation. By 2005, the total number of new residential building permits was 289 (Figure 12). By the end of 2007, however, a second economic storm that impacted the whole country took hold in Transylvania County and carried though 2008 as the financial markets collapsed – in large part to the housing market bubble burst. It took several years for the employment sector to come back and the unemployment rate is now close to pre-recession levels (Figure 11). From a building construction perspective, the amount of activity is still well below 2005 levels (Figures 13 and 14).

40% -60% -40% -20% 0% 20% Educational services 2007-2014 % Manufacturing Change in Jobs Admin. & support & waste 2010-2014 % mgt. & remediation Change in Jobs Retail trade Accommodation and food services Finance and insurance Health care and social assistance Other services (except public administration) Transportation and warehousing Arts, entertainment, and recreation Construction

Transylvania County's Major Employment Sectors

Transylvania County Building Permits

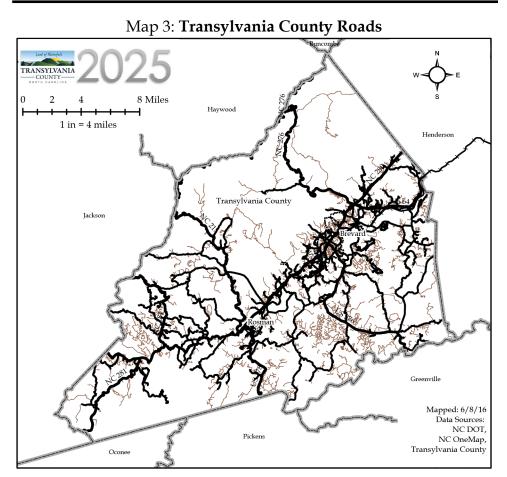
Issued by Transylvania County Building and Permitting Department



On a positive note, many of the county's small, high tech manufacturers and businesses that focus on the county's natural resources were able to weather this storm and grow (Figure 14). Many of these businesses have taken advantage of the Brevard Music Center, Brevard College, Pisgah National Forest, DuPont State Recreational Forest, Gorges State Park and, most recently Headwaters State Forest. Tourism, with a focus on the county's large artistic community and outdoor resources, continues to grow in large part due to the great success of the county's Tourism Development Authority's strategic marketing investments. According to a recent USDA 2015 report, Transylvania County is identified as having a "recreation economy" based on earnings from entertainment, recreation and accommodations, employment trends and the amount of seasonal housing (USDA 2015).

Figure 14, Source: Census County Business Patterns

Figure 14 provides a comparison of employment sectors and the overall change in jobs between (2007-2014) and (2010-2014). Major trends include increases in education, manufacturing and transportation. At a regional level, significant growth is centered around south Buncombe County – north Henderson County where there is access to flat land, I-26 and I-40, public water and wastewater, and the Asheville Regional Airport.



Infrastructure: During the development of the 2025 Comprehensive plan, discussions about the county's infrastructure focused on the major attributes such as roads, water and sewer, broadband and other features like waste collection (trash), public transportation and rail access. Many of these attributes are the responsibility of public or private organizations such as the NC Department of Transportation, City of Brevard, and Comporium Communications. How the county addresses these issues in the next ten years will have a significant impact on the well-being of its citizens and how attractive the county may be for future business investment. The following is a brief description of the county's current infrastructure.

Transportation

Roads: Transylvania County's road networks include US highways, state highways, state routes and private roads (Map 3). The major road corridors that cross the county are US Highway 64, US Highway 276, US Highway 178, NC Highway 280, NC Highway 215 and NC Highway 281 (Map 3). The county is connected to Interstates 40 and 26 by NC Highway 280 and US Highway 64.

The North Carolina Department of Transportation (<u>NC DOT</u>) is responsible for the public roads in Transylvania County. NC DOT funding is determined through a ranking process for the state, region and local district levels. Planning for future road projects is coordinated by the Land of Sky Rural Planning Organization (<u>RPO</u>). This group works with elected officials, Transylvania County Transportation Advisory Committee, the City of Brevard, county staff and other stakeholders to identify local priorities. Approximately every ten years, the NC DOT, RPO and Transylvania County collaborate on a Comprehensive Transportation Plan that is also used to identify road and transportation priorities.

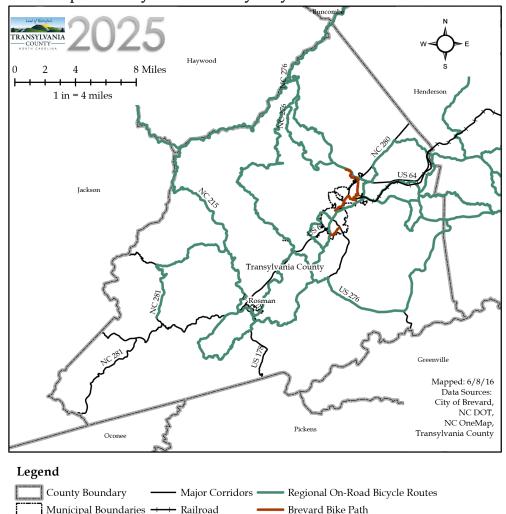
Legend

Airports: The Asheville Regional Airport in Buncombe County is the closest commercial airport to Transylvania County and is within a 25-minute driving distance from downtown Brevard. Inside the county, NC DOT recognizes one airport in Brevard. However, there is also a private runway in Penrose. Near Cedar Mountain, at the former DuPont facility, there is also an old airport that is used for training and medical evacuation.

Railroad: Transylvania County has one railroad line that runs along the French Broad River from Ecusta Road in Brevard to Henderson County (Map 4). This railroad is owned by Watco Companies and has been inactive for the last decade. With the lack of use and maintenance, the railroad trestles (tracks), bridges and railroad bed are deteriorating. The cost of reclaiming and operating this railroad line may be expensive and cost prohibitive for a railroad owner.

Bicycles: Transylvania County has a large biking community that is supported by eight NC DOT numbered bicycle routes and over 300 miles of gravel and single-track bike trails in the Pisgah National Forest and DuPont State Recreational Forest. NC DOT has invested in signs on many of the regional bike routes located on the public roads. In Transylvania County, 0.61%-1.92% of commuters bike to work which is higher than the national average and is a greater percentage than seen in other counties in the region (walkbikenc.com and LOS Regional Bike Plan). The City of Brevard has developed local bike paths that connect parts of Brevard with Pisgah National Forest and other points of interest including Brevard High School. There is also a grassroots effort to increase the multiuse trail network of the county by converting the railroad to a multi-use trail through the Ecusta Trail Project. The Ecusta Trail proposes to connect the Brevard Bike Path with Henderson County along the railway corridor. Additionally, a regional bike plan created by Land of Sky Regional Council identifies a connection between Mills River and Brevard as one of the top five regional priorities (Blue Ridge Bike Plan 2013).

Map 4: Transylvania County Bicycle Routes and Railroad



Did You Know?

In addition to transportation, the availability of land with connection to water and sewer infrastructure has a great impact on the ability for certain areas to have economic growth through the development of industry and housing. **Public Transportation:** While Transylvania County is not served by mass transit, limited public transit is available for residents. The <u>Transylvania County Transportation Department</u> assists children, the elderly and the disabled to fulfill daily needs including trips to the doctor, picking up groceries, day care, etc. The county also coordinates a taxi service for additional needs in the community and helps coordinate rides for those needing access to Asheville or Hendersonville for medical assistance. The public transit is funded primarily by state and federal grants.

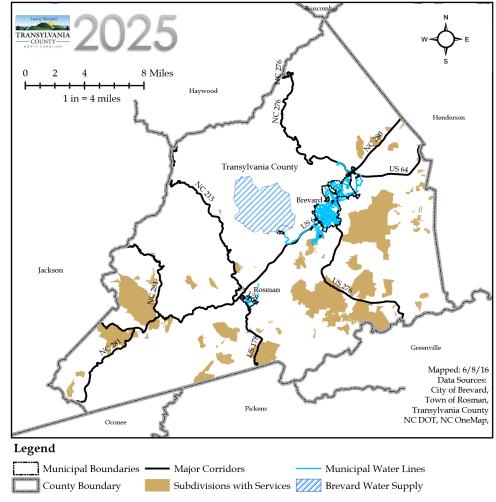
Utilities

Water: Over the past decade, water and wastewater issues have significantly impacted Transylvania County. During the 5-year drought in the mid-2000s, many wells in the county experienced low flow as the water tables dropped. Similarly, dry fire hydrants located along streams throughout the county were compromised. During that time, Transylvania County, the City of Brevard and the Town of Rosman, like many other areas in North Carolina, discussed ways to link water systems. Of particular concern was the impact of water availability on our local business and economic potential and prospects for future water sources. Various water intake scenarios were evaluated and consideration was given to the effects of future land use and economic potential based on the locations.

The existing water service provided by Brevard and Rosman is able to accommodate current and projected future growth with physical plant upgrades. The City of Brevard has a permitted water treatment capacity of 2.6 million gallons of water a day (MGD) and relies entirely on Cathey's Creek. The Town of Rosman has three deep wells and a total production of over 75 thousand gallons a day. Both systems are well within their permitted capacities, but as new water customers are added, both will have to begin planning for future growth. Looking into the future, many existing water lines are 50 years old or older and will have to be upgraded. Similarly, if the county is to be successful in establishing new corridors for economic growth, new distribution lines will be required.

Did You Know?

Elevation greatly influences water supply and its distribution throughout the county. While water can be moved just about anywhere, the cost to do so can be significant. Moving water over the county's mountainous terrain requires pumps and more energy use compared to letting gravity help move water downhill.



Map 5: Transylvania County Water Supply and Service

Rosman: It is difficult to estimate the total volume of water available to withdraw from Rosman's three deep wells without compromising the groundwater system's capacity. The Town of Rosman has indicated that it may want to explore alternative water sources such as the North Fork of the French Broad.

Brevard: The <u>City of Brevard</u> built the current water treatment facility on Cathey's Creek in 1958 (Map 5) and has continued to upgrade it to meet demands.

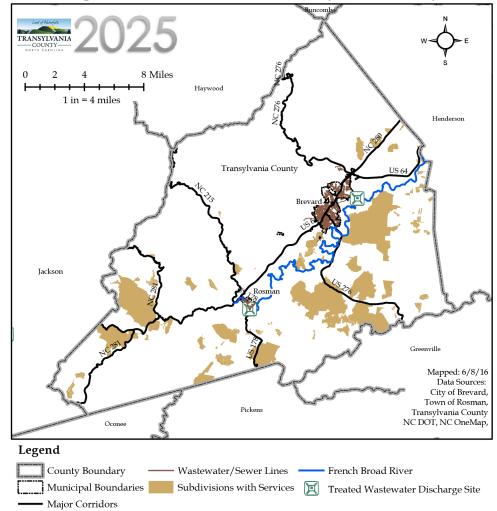
Wastewater: The majority of households and businesses in Transylvania County have individual septic systems or engineered waste water systems to treat and dispose of wastewater and sewage. Current regulations that determine how septic systems are designed, installed and function are enforced by the Transylvania County Health Department in an effort to keep people safe and protect the water quality in the rivers.

Both the Town of Rosman and the City of Brevard have permitted wastewater treatment plants (Map 6). The City of Brevard has made many improvements to its wastewater treatment plant off Wilson Road in order to accommodate larger volumes of wastewater and has also established an aggressive program to upgrade existing wastewater collection lines and pump stations. The pump station and line off Neely Road has been a perennial concern. This station is currently being replaced and its replacement is expected to dramatically reduce overflow issues. In addition, the city is adding additional storage capacity at the wastewater treatment plant to accommodate larger volumes of water and continues to seek ways to reduce the amount of stormwater entering the wastewater collection system.

The Town of Rosman's wastewater system is newer and is permitted to treat 250,000 gallons each day. Future expansion of the wastewater plant (capacity) will be needed as Glen Laurel, a 250 lot/ unit subdivision, begins to fully build out and uses more of Rosman's wastewater system.

As with water, it is expensive to maintain and upgrade these facilities. To help promote sound economic development growth policies, the county may need to explore ways that it can help support the expansion and/or upgrades to these facilities.

The current water supply is expected to adequately meet the city's projected growth over the next 30 years, but there is a recommendation to move the intake closer to the confluence of the French Broad River to increase the potential amount of water and protect the aquatic habitat during a drought (McGill and Associates 2015). The City of Brevard has explored other waterintake locations over the past several years to either supplement or replace the existing water-treatment facility on Cathey's Creek. The county may need to incorporate additional lands in a watershed ordinance if there is a change in the water intake location.



Map 6: Wastewater Services in Transylvania County

Stormwater: Stormwater retention and management while a significant issue for urban areas is not a current concern for rural counties like Transylvania. The City of Brevard, however, is actively seeking ways to manage stormwater separately from its wastewater. This accomplishes two things: it extends the life of the wastewater treatment plant and its capacity to treat waste, and it reduces the amount of untreated water entering the French Broad River and its tributaries.

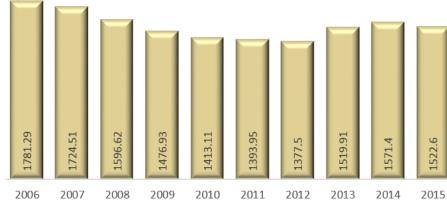
Did You Know?

The amount of waste accepted by the landfill has proven to be a great measure of the economic changes that have influenced the county. During the height of the great recession, the amount of waste deposited in the current land fill dropped off by 30% as the amount of housing and construction debris slowed down (Figure 15). **Solid Waste:** Transylvania County is one of 27 counties in North Carolina that has its own permitted Subtitle D landfill (Map 7). The current facility was permitted in 1993 and has a life expectancy, based on the current volume of waste and the size of the landfill, that should last until approximately 2025. The county will have to determine whether to expand the solid waste facility by adding new capacity through building additional 2-5 acre cells in the usable portion of the existing 160 acres, or to begin shipping waste to a private landfill (most likely in South Carolina).

Keeping waste out of the landfill is extremely important from the perspective of managing cost. The more material that is reused or diverted to recycling helps extend the expected life of the landfill. Recycling programs have had a significant and positive impact on the total amount of waste (Figures 15 and 16), but there are still lots of people who choose not to recycle. Approximately 1,500 jobs in NC have been created by the recycling industry. Citizens are also encouraged to practice waste reduction techniques such as composting and donating reusable items to charitable organizations to help divert waste.



Landfill Waste (in Tons)



Recycling (in Tons)

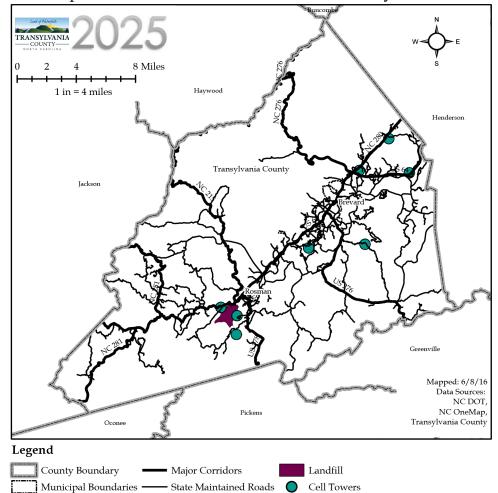
Figure 16, Source: Transylvania County Solid Waste Department

Communication

Internet: Business and residential Internet service is available throughout Transylvania County from Internet service providers. Comporium provides the majority of businesses and residents with broadband, Internet and cable TV service, as well as local telephone access. In 2014, Comporium initiated a major change to its Internet service by upgrading customers to a cable internet system. Depending on the location and type of service, download speeds are up to 500Mb/s and upload speeds are up to 100Mb/s. The system-wide upgrade started in the Brevard area and expanded outward toward the rural areas of the county. At completion, Comporium will be able to deploy this new cable-based Internet service to nearly 90% of county residents by the first quarter of 2017.

Comporium serves the county with multiple, redundant 10-Gbs circuits using diverse routes out of the county. There are also additional fiber circuits available and in use with other vendors such as AT&T, Morris Communications and Education and Research Consortium (ERC) of Western NC.

Wireless Signal Availability: Transylvania County has a total of only eight telecommunication towers located throughout the county with two additional towers in the City of Brevard (Map 7). The two major service providers are AT&T and Verizon. Reception is poor in many locations, particularly the more rural areas or in areas where coverage is interrupted by mountains. The county has a Telecommunication Tower Ordinance that encourages "co-location" of cell phone arrays and discourages the installation of new towers in certain areas of the county – particularly where they might negatively affect scenic views. Expanding cell phone and mobile device coverage is desired to promote greater access to our citizens and visitors and to improve safety. As a way to help promote downtown Brevard and its economic development efforts, Comporium installed Wi-Fi access points on the tops and sides of buildings along Main and Broad Streets. This service is free to any user wanting to access Wi-Fi in downtown Brevard. More recently, options have been explored to expand this network of free Wi-Fi service to other areas. Comporium's Traveling Access Point (TAP) has also been deployed at several area venues and events to assist in on-line activities where Internet and Wi-Fi are not normally available.



Map 7: Telecommunication Towers and County Landfill

Transylvania County's Economic Health Goal, Objectives and Action Steps

Goal: Transylvania County has a diverse and vibrant economic base that is business-friendly and is supported by exceptional infrastructure.

Objective 1) Actively supports efforts to promote and grow existing businesses and create places and policies to attract new businesses

Action Steps

Current:

- a. Create incentives to support the development of well-paying jobs that allow families to support themselves without government assistance
- b. Coordinate, collaborate and fund efforts by Transylvania Economic Alliance (TEA), other agencies and jurisdictions to expand the economic base through development of infrastructure, the creation and upgrading of industrial/commercial locations and economic development sites
- c. Partner with local non-profits to better connect citizens currently relying on subsidies with training programs for better paying jobs
- d. Support Transylvania County's Tourism Development Authority's (TDA) efforts to expand the way-finding project to guide visitors to attractions throughout the entire county

Future:

- e. Streamline the permitting/licensing process to coordinate customer service across departments and jurisdictions
- f. Offer incentives for businesses and development that go above and beyond permit requirements by using best management practices to limit negative environmental impact, such as air and water pollution
- g. Support the development of an industrial park, industrial infill development and a shell building program
- h. Consider adopting policies to facilitate development of future water and sewer investment
- i. Promote efforts highlighting our quality of life, encouraging businesses to locate here
- j. Support and promote efforts initiated by arts and culture groups that will increase economic opportunities

- k. Support marketing campaigns that promote the French Broad River and other outdoor recreational opportunities
- I. Ensure adequate funding for economic development, related investments, public-private partnerships and grants for small businesses

2025 Survey Q16: In the next 10 years, what businesses would you like to see more of?

1,836 respondents prioritized given categories. Of those responses the following categories were chosen as high priority:

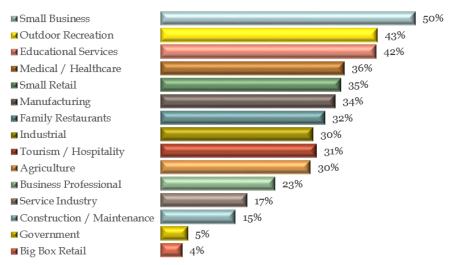


Figure 17, Source: 2025 Comprehensive Plan Survey Data



Transylvania County's Economic Health Objectives and Action Steps Continued

Objective 2) Initiates efforts to maintain and enhance infrastructure in order to improve our unique quality of place

Action Steps

Current:

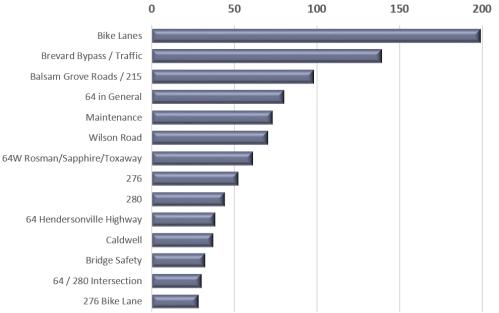
- a. Support efforts that provide water and sewer infrastructure for new and existing businesses
- b. Work closely with NC DOT, the City of Brevard, and the Town of Rosman to support an efficient and modern transportation system that is safe, well maintained and accommodates a wide range of transportation choices including vehicular, pedestrian, bicycle and public transportation throughout the county and region
- c. Increase support and adequately fund mobility services for older adults and people with disabilities throughout the entire county
- d. Evaluate and identify alternative transportation services such as ride-share
- e. Support and incentivize efforts to realize county-wide coverage for cell phone service
- f. Coordinate best management practices, technology, educational efforts and convenience centers to promote recycling and waste reduction to extend the life of the county landfill
- g. Engage in the NC DOT "Walk/Bike NC" Program and the "FAST Act" Programs

Future:

h. Encourage state and federal leaders to change funding formulas that use census figures which fail to account for the large percentage of non-resident property owners i. Advocate for actively identify locations, funding and necessary partnerships to increase broadband coverage, speed and reliability throughout the county

2025 Survey Q18: Road improvement and construction requires many years to plan. In your opinion, what one road or road improvement is needed in 10 years?

Answered by 1,388





Focus Area 2: Environmental Health

Environmental Assessment

The natural environment is one of the county's greatest assets and also one of its greatest challenges (Map 8). People travel from all over the country, if not the world to visit and enjoy the natural resources of the county. These visitors require places to stay, eat, bike and hike. Meeting the needs of county residents and visitors alike is a balancing act.

Located in the Blue Ridge Mountains of Western North Carolina, Transylvania County has many steep slopes and deep ravines which extend from 1,265 feet above sea level at Lake Jocasee to just over 6,000 feet along the Blue Ridge Parkway. The climate is moderate with an annual average temperature of 53.8 degrees Fahrenheit. The western edge of the county toward Lake Toxaway, Sapphire and Gorges State Park boasts the greatest rainfall east of the Mississippi River with an average rainfall of 91.7 inches. Yet there are areas in Pisgah Forest that receive as little as 65 inches of rain per year, an amount that still exceeds most areas in the southeast.

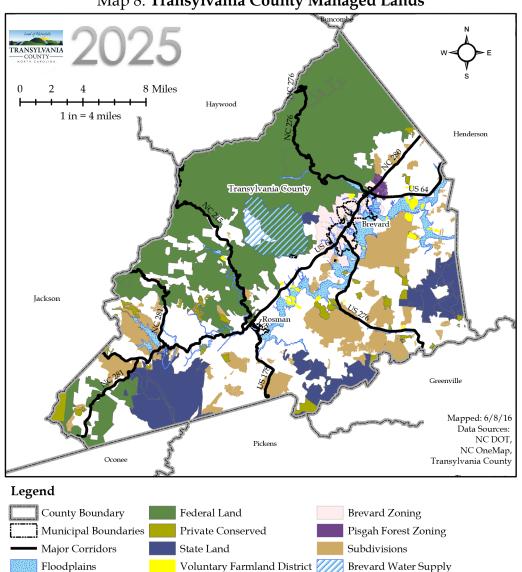
The landscape, with such varying environmental conditions, creates a variety of habitats that are home to a great diversity of plants and animals. To help protect this special and environmentally diverse area, nearly 49% of the land in Transylvania County has been protected by federal, state, or private conservation efforts (Figure 22 and Table 3).

Conserved Lands in Transylvania County	Acres of Land	Percent of Protected Land Area
National (Pisgah & Nantahala National Forests and Blue Ridge Parkway)	89,359	37 %
DuPont State Recreational Forest	5,941	2%
Gorges State Park	8,092	3%
Headwaters State Forest	5,052	2%
NC Wildlife Resources Commission	2,842	1%
Total Land in Public Ownership	111,286	46%
Lands Conserved Through Easements	6,477	3%
Private Preserves	1,542	0.6%
Total Acres Managed for Conservation	119,305	49%

Table 3, Source: 2015 NC Heritage Program Data downloaded from NC OneMap

Did You Know?

It is estimated that 80% of the plants and animals found in North America could find suitable habitat in Transylvania County (Map 9). **Forest Resources:** The forest resources, including timber, tree bark and the diversity of tree species in Transylvania County inspired the creation of the nation's first school of forestry, the Cradle of Forestry, which celebrated its 100-year anniversary in 2016. Logging increased in the late 1800's with the advent of rail, and by the early 1930's, a large percentage of the county's forests had been logged. Descriptions of the forests from the early botanists, including Pinchot and Ashe from 1897, are detailed enough to give us an idea of what the forests were like at that time (NC Division of Forest Resources 2011). The forest types were — and continue to be — determined by a mixture of forces including soils, elevation, topography, river valleys and human influences. These forests support rare species such as the pink-shell azalea, Carolina northern flying squirrel and many other diverse plants and animals.



Map 8: Transylvania County Managed Lands

Today, there are 116,391 acres of private timberlands, which in combination with the public timberlands, produced \$33.7 million in economic benefit and employed 125 people as of 2012 (NC State University 2014).

Did You Know?

The French Broad River is the third oldest river in the world.

Water Resources: Transylvania County is located on the Eastern Continental Divide that separates the Savannah River Basin from the French Broad River Basin. The French Broad River and its tributaries flow north and ultimately merges with the Ohio River before draining to the Gulf of Mexico. The French Broad River is created by the convergence of its four major branches, the North, West, Middle and East Forks. Little River, Davidson River and South Fork Mills River also flow into the French Broad River.

The Savannah River Basin includes the Toxaway, Horsepasture, Thompson and Whitewater Rivers, which combine in South Carolina and flow to the Atlantic Ocean. These waterways create great recreational opportunities as people enjoy fishing, paddling and tubing on the rivers. These rivers are also home to many rare species including the Appalachian elktoe mussel, the French Broad crayfish, the Wisconsin stripe-tail stonefly and the large hellbender salamander (Table 4). **Agricultural Resources:** Transylvania County has a culturally rich and productive agricultural presence. According to the 2012 Census of Agriculture, there are 221 farms in Transylvania County covering 17,929 acres or just over 7% of the land area (Figure 19 and Figure 22) (USDA 2012). Agriculture, directly or indirectly, provides about 1 in every 5 jobs and has an economic impact of over \$27 million, which does not include certain types of agricultural sales from farmers markets, or specialty products sold locally.

North Carolina has lost 664,245 acres of farmland between 2002 and 2012, which represents an estimated 181 acres of farmland lost each day and is a faster loss than any other state in the nation (Agricultural Census and CTNC 2014). In Transylvania County, the number of acres in agricultural use decreased by 2,126 acres between 2002 and 2007, and then increased by 1,884 acres between 2007 and 2012 for a total loss of only 242 acres (USDA). This rebound in agricultural use bodes well for the support of our natural resources and economy.

Did You Know?

Woodland provides:

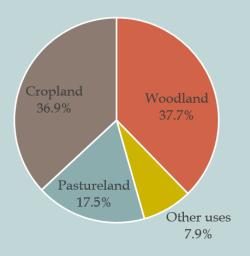
- wild craft production
- corridors for wildlife
- groundwater re-charge

Cropland provides:

- food
- habitat for native plants and pollinators when field border and stream side vegetation is maintained

Pastureland provides:

- groundwater re-charge
- potential habitat for native plants and pollinators



Transylvania County Agricultural Land 2012

Figure 19, Source: 2012 USDA Agricultural Census



Agriculture plays an important role in protecting our natural resources.

- Native insect pollinator species pollinate two-thirds of agricultural crops and depend on a high diversity of native plants and habitats to survive.
- Field borders can serve as habitat for pollinators and can also be corridors for plant seeds and animals to move between habitats.
- Agriculture can preserve water resources and protect the floodplain by reducing the development of hard impermeable surfaces such as roads and houses. The development of roads and structures decreases the groundwater recharge after a rain storm which increases the amount of stormwater pollution flowing directly into the rivers and streams. Alternatively, open fields allow the rain water to soak into the ground.

Flora and Fauna Biodiversity: Forests, farmland and wild areas serve as important habitat for over 1,000 species of plants, insects and animals. The southern mountains of North Carolina are home to the most salamander species in the world with 400 endemic species that exist nowhere else in the world. The diversity of the plants (flora) and animals (fauna) tell us a lot about the health of the forest, water, air and recreation assets. More species and more abundant populations of flora and fauna signal a healthier environment and ecosystems. Healthy ecosystems of varied habitats and species are more resilient to natural disasters, diseases and pests.

Increases in human population require additional commercial, residential and industrial development to meet the greater economic needs of the community. As farmland and forests are developed, wildlife habitat is reduced or fragmented into smaller isolated patches. Isolated or fragmented wildlife habitat supports fewer species of animals and plants because populations decline or disappear from habitats that are too small and isolated from natural areas. Wide and connected areas of natural open space across the landscape allows plant seeds and animals to travel between the protected lands.

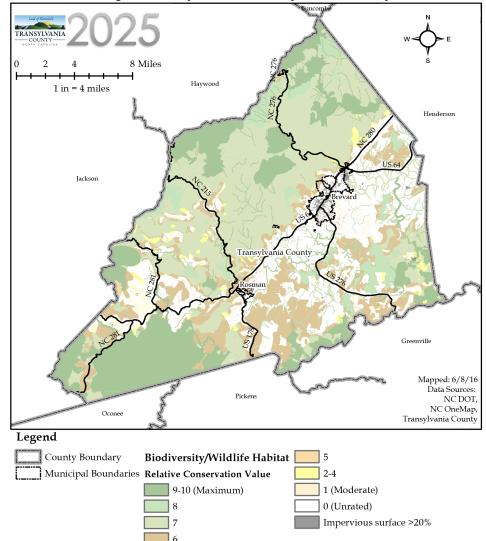
In addition to connecting habitat, flora and fauna diversity can also be protected by reducing pollution levels through using best management practices and removing exotic invasive plants and animals such as kudzu, zebra mussels, hemlock woolly adelgid and privet.

Examples of Federally Listed Animals and Mussels

Common Name	Federal Status
Animal:	
Bog turtle (Southern and Northern Populations have different regulations)	Threatened
Carolina northern flying squirrel	Endangered
Gray bat	Endangered
Northern long-eared bat	Threatened
Mussel:	
Appalachian elktoe	Endangered

Did You Know?

Maintaining habitat connectivity across the landscape by supporting rural land uses and encouraging development designs that buffer and connect natural habitats is an important way to enhance the health of natural resources and their associated economic benefits (<u>NCWRC 2015</u>).



Map 9: Transylvania County Biodiversity

Table 4, Source: NC Natural Heritage Data

Transylvania County's Environmental Health Goal, Objectives and Action Steps

Goal: Transylvania County preserves, conserves, protects, enhances and utilizes its environmental and agricultural resources to provide access for outdoor experiences while increasing recreational and economic development opportunities.

Objective 1) Actively supports efforts to conserve and protect the natural resources

Action Steps

Current:

- Promote collaboration between private, non-profit and public agencies at the local and regional levels to promote stewardship and responsible use of public lands to ensure the continued viability of our state and federal lands
- b. Coordinate with appropriate agencies and work with private landowners to maintain and enhance water quality, forest health and sensitive natural areas through management planning and the promotion of best management practices
- c. Partner with the City of Brevard, the Town of Rosman, public land managers and adjacent jurisdictions on comprehensive water planning and usage to ensure that adequate, highquality water is available for the future
- d. Ensure that landowners have knowledge of the opportunities and funding mechanisms for the adoption of best management practices
- e. Continue to provide assistance to identify and preserve significant lands and scenic areas
- f. Promote educational campaigns regarding the proper use of pesticides, fertilizers and house-hold hazardous waste

Future:

- g. Encourage development patterns that voluntarily reduce habitat fragmentation and conserve the rich natural resources of the county
- h. Promote the use of native and nectar plants in county government construction projects and encourage the use of these plants species in private commercial and residential landscaping
- g. Participate in the protection and designation of water supply watersheds

2025 Survey Q10: What is Transylvania County's most important asset to keep?

1,787 respondents answered this open-ended, write-in question.

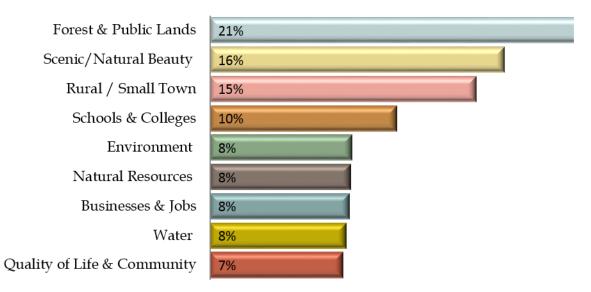


Figure 20, Source: 2025 Comprehensive Plan Survey Data



Transylvania County's Environmental Health Objectives and Action Steps Continued

Objective 2) Promotes and protects a diversity of agricultural, working lands, and forestry operations throughout the county

Action Steps

Current:

- a. Collaborate with other government agencies, private and public landowners and stakeholders to preserve prime farmland, working lands, sensitive areas and significant natural resources
- b. Work with state and federal agencies and other regional partners to attract agribusiness-related grants and revenue sources and support efforts to establish pilot programs related to new agricultural technologies and products

Future:

- c. Work with local landowners to develop, produce and promote natural resource products in a sustainable manner and expand local and regional markets for goods produced
- d. Promote and support the development of a covered location for a yearround farmer's market and support the development of additional summer markets throughout the county
- e. Support a regional agricultural production facility that is regulatory compliant for processing and storage
- f. Connect potential farmers with landowners willing to lease their lands or mentor new farmers

2025 Survey Q21: Agricultural Prioritization " ...please indicate how important each of the following is to you:"

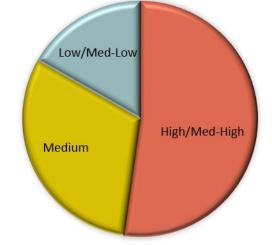


Figure 21, Source: 2025 Comprehensive Plan Survey Data



Focus Area 3: Land Use and Livability

Land Use and Livability Assessment

Transylvania County is one of the few counties east of the Mississippi River that has about half its land area owned or controlled by federal and state agencies (Figure 22). This fact, along with the county's mountainous terrain, the French Broad River, its many tributaries, and their associated flood areas (floodway or 100-year floodplain) has defined the land use patterns.

The way land is developed can have a tremendous impact on the built environment and the safety of our citizens and their property. Land use planning is often associated with zoning and with local jurisdictions determining the types of uses allowed. The City of Brevard and Town of Rosman are the only incorporated municipalities in Transylvania County and make up approximately 17% of the county's total land area and 37% of the county's 2010 US Census population. With the exception of a very small area in Pisgah Forest, there is no zoning in the county although private deed restrictions in gated and ungated communities like Connestee, Lake Toxaway, Burlingame, and Glen Canon make up some 12% of the county's geographical area and have restrictions that control the types of development that can take place.

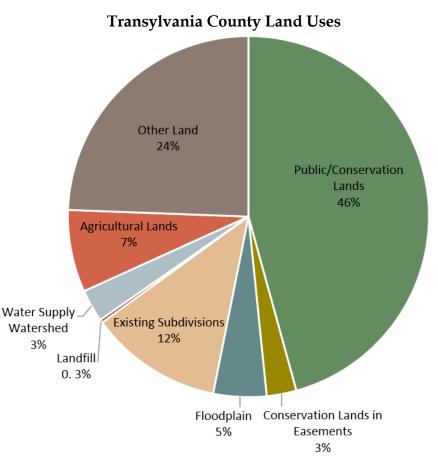
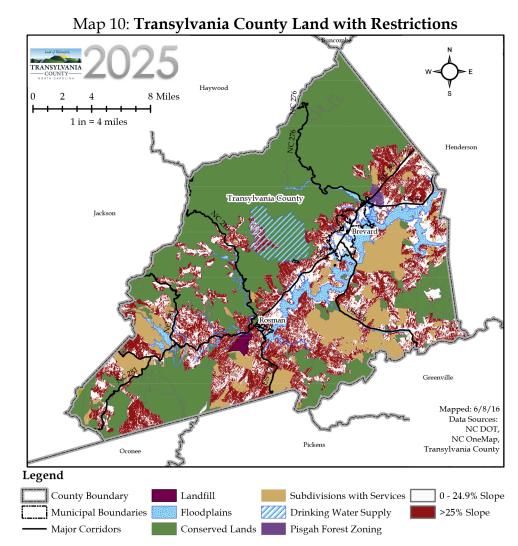


Figure 22, Note: These distinct areas often overlap in land area. For example, many agricultural lands are in the floodplain. Therefore the percentage of "Other Land" is likely greater than 24%. Source: NC OneMap, NC Natural Heritage Program Data, Transylvania County Data

Land Development: Transylvania County has abundant natural resources that are important for the preservation of the County's culture and quality of life. Minimizing land disturbance and working with the natural topography and soil properties during construction can decrease grading costs and protect our environment by reducing erosion and ensuring properly functioning septic systems. Soil types with unique physical properties may or may not be appropriate for on-site septic systems. Slope also influences the suitability and cost of development. Many areas of the County have slopes greater than 25% which, according to the County Subdivision Ordinance and NC DOT, negatively impacts building roads and property accessibility (Map 10). These areas are also more susceptible to land slides or slips during excessive rain events.

Floodplain: Lands near rivers and streams may be subject to periodic flooding and, as a result, not be appropriate for buildings or may require buildings to be elevated. Floodplain management is critical with nearly 5% of the county in floodplain (Map 10 and Figure 22). As of May 2016, there were 163 flood insurance policies in Transylvania County and Rosman that protect homeowners from the financial burden of flood damage. To maintain and possibly reduce the insurance premiums on these policy holders, Transylvania County adopted the <u>Flood Damage Prevention Ordinance</u> and manages development within the floodway and the 100-year floodplain. The primary goal of floodplain management is to keep flood heights to a minimum.



Public Safety: Transylvania County is served by a dedicated sheriff's department that recently increased the number of patrol deputies on each shift to improve the average response time for each call down to 9 minutes 35 seconds in 2015. As the population of the county grows, planning for additional safety facilities may be needed to keep response time to a minimum (Map 12). For newly-developed areas of the county, additional attention to the safety and accessibility by first responders through steep, narrow mountain roads will also be necessary.

Zoning: Zoning is a local tool that designates mapped areas with specific regulations regarding the use, form, design and compatibility of development. Only 10,041 acres (4%) in Transylvania County are zoned, and includes: the City of Brevard (3,403 acres), the City of Brevard's Extra Territorial Jurisdiction (ETJ) (5.974 acres), and the Pisgah Forest Community Zoning District (664 acres) (Figure 23). The Pisgah Forest Community Zoning District is considered county zoning and is administered by the county. The Pisgah Forest Community Zoning District does not regulate form or design, but does identify what types of land use can be permitted and how different uses are separated. For instance the Pisgah Forest Community Zoning District allows residential use anywhere. Industry, junkyards, slaughtering plants and other special uses are required to have setbacks from roads and a buffer of vegetation to separate that special use from neighboring land uses. The remainder of the County has no public zoning requirements and essentially any type of land use is allowed with no requirements for visual barriers or separation from schools, healthcare facilities or residential properties. That means that a property owner is allowed, by right, to do anything with their property (and so is their neighbor) that is not restricted by state and federal laws. In North Carolina, 79 out of the 100 counties have some form of county zoning including Transylvania County. Only 15 counties lack zoning completely (School of Government 2014).

Housing: The type of housing, where it is located, and how it is used tells us many things about the county, including population growth, economic development, household income and part-time residency. Housing data also indicates what type of additional housing the county may need.

In the 2010 U.S. Census there were 19,163 existing housing units includ-

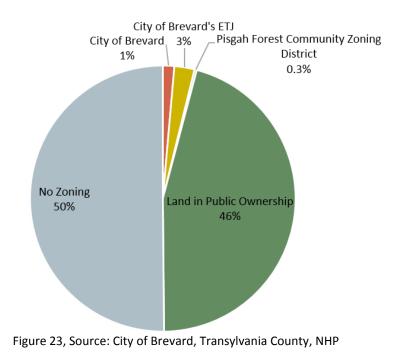
ing houses, apartments and condominiums in Transylvania County. Transylvania County has one of the highest ownership rates in Western North Carolina. The 2010 data shows that 75% of housing units are occupied, with 56.7% owner occupied, 18.4% renter occupied and 24.9% vacant. Of the vacant housing, 66.3% (or 16% of the total housing units) are considered seasonal and are vacant for only portions of the year. While 18% of the houses are rentals, there is a waiting list for many long-term rentals and a vacancy rate of 0.8% (<u>Bowen Report</u> <u>2015</u>).

Did You Know?

- Median home value = \$167,400
- Homeowner vacancy rate = 2%
- Rental vacancy rate = 0.8%
- Occupied housing units = 13,893
- 5% of units have no vehicle available

Sources: Land of Sky Regional Council 2015-2019 CEDS, and Bowen Report 2015

Transylvania County Zoning



In addition to the lack of available long-term rentals, there is also a shortage of affordable housing. The US Census reported that between 2009 and 2013, 30% of home owners and 40% of renters in Transylvania County spent more than 30% of their annual income on housing.

> To qualify for housing assistance from the <u>U.S.</u> <u>Housing and Urban Development</u>, the maximum annual income for a family is 50% the median household income and in Transylvania County that ranges from \$20,890 to \$51,560 ,depending on family size. That means that there are between 3,900 and 8,400 households that qualify for government subsidized housing or housing vouchers. This represents 20%-44% of the county's households.

Public Response to Housing - 2025 Survey

In the 2025 survey people were asked "What types of housing does Transylvania County need", and 788 answered the high priority was single-family housing, with multi-family and continuing care considered high priority for 350-390 participants and secondary or vacation homes considered a priority for only 58 respondents (Figure 24).

A greater portion of the people who took the survey owned their own homes (83.3%) (Figure 25), compared to the number of residents who owned their own homes as calculated by the census in 2010 (72%) (Figure 27). With a larger portion owning their own homes, it is logical that 76% are able to find adequate housing based on their income. Of those who said "No" to question 14 (Figure 26), the majority make between \$15,000 and \$34,999 annually. Based on the survey there is a portion (up to 8%) of the homeowners who are uncertain of whether they are able to find adequate housing within their income.

2025 Survey Q15: What types of housing does Transylvania County need? High Priority:

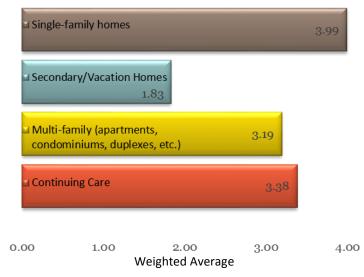


Figure 24, Source: 2025 Comprehensive Plan Survey Data

2025 Survey Q13: Do you own or rent your residence?

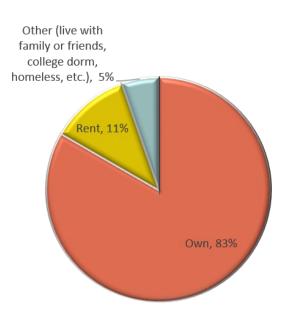


Figure 25, Source: 2025 Comprehensive Plan Survey

Survey Q14: Based on your income, are you able to find adequate housing for you and your family in Transylvania County? Answered: 1,832 Skipped: 281

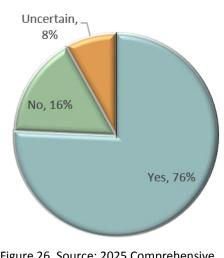


Figure 26, Source: 2025 Comprehensive Plan Survey Data

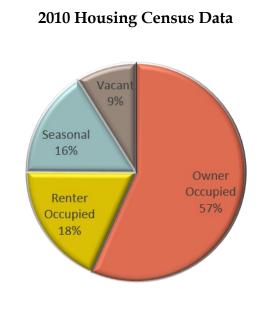


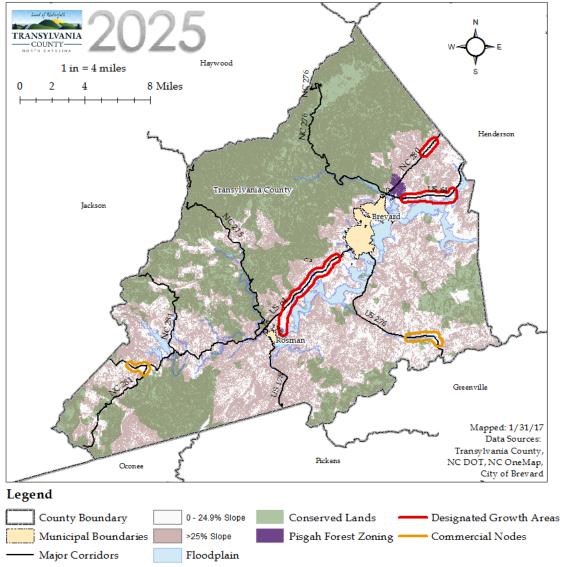
Figure 27, Source: Census.gov

Land Use: More than 65% of the land in Transylvania County is unsuitable for industrial or dense development because it is in public ownership, located in the floodplain, on steep slopes, has unsuitable soils or lacks connection with existing public water and sewer. As Transylvania County invests resources and creates policies to guide and support future growth, it is important to know where development is most likely and appropriate.

Future economic development of manufacturing, commercial, and higher density residential housing will be constrained to areas with relatively flat land located out of the floodplain with access to major corridors and utilities (Map 11). The designated growth areas shown on Map 11 are examples of suitable land for industrial or dense development, where infrastructure expansion is possible. Areas with suitable land for commercial growth, but without access to public water and sewer are identified in Map 11 as commercial nodes. Designated growth areas and commercial nodes along with appropriate policies will provide a framework for infrastructure expansion that will strengthen the confidence of public and private investors about the future of the land and their investment.

The designated growth areas and commercial nodes are areas that could be prioritized for future small area planning. Small area plans allow communities to determine their own destiny. Typically, these plans highlight opportunities and challenges and create solutions that promote the desired characteristics identified by the community.





Transylvania County's Land Use and Livability Goal, Objectives and Action Steps

Goal: Transylvania County recognizes and supports private property rights while actively seeking ways to promote new growth and development through citizen driven policies and procedures that include, but are not limited to, safety, livability, extension of utilities, road improvements and community character.

Objective 1) Supports land use that increases the economic opportunities while preserving the cultural and natural resources

Action Steps

Current:

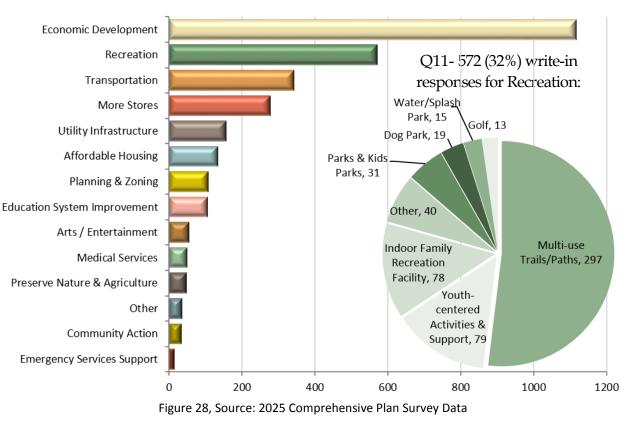
- a. Adopt policies that protect the county's interest to support future economic development
- b. Promote market driven development of greater housing options and advocate for changes to the building codes for proven, safe housing alternatives

Future:

- c. Actively protect property rights by recognizing that the first and best use of property is determined by property owners who have a right to earn a living on their properties, and who are wholly responsible for the control, use and exchange/disposal of their property within current applicable laws
- d. Facilitate community based workshops to identify local concerns and help create possible solutions
- e. Identify alternative funding mechanisms to support affordable in-fill housing throughout the county
- f. Collaborate with other agencies and jurisdictions to identify and encourage the redevelopment of underutilized properties for future industrial, commercial and/or residential use

g. Review and update existing ordinances as needed to facilitate development that preserves forests, prime agricultural lands, sensitive areas and natural resources including the native flora and fauna

2025 Survey Q11: What's not here now that you would like to see?



Open ended write-in question answered by 1,771:



Transylvania County's Land Use and Livability Objectives and Action Steps Continued

Objective 2) Ensures public safety efforts are financially supported, well-coordinated and prepared for future growth

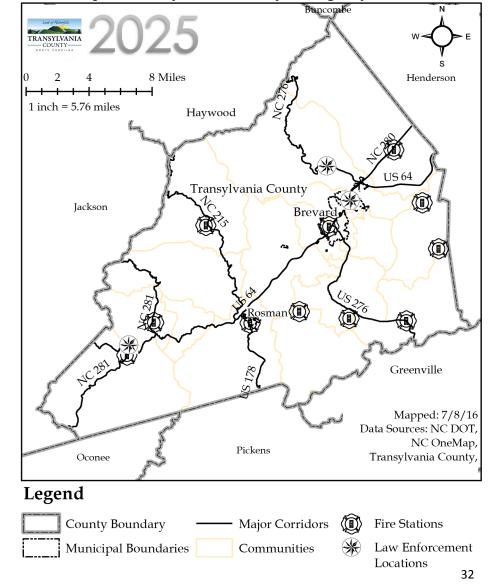
Action Steps

Current:

- a. Evaluate the potential for full-time fire and emergency professionals in the future
- b. Continue to hold dialogue sessions between law enforcement and citizens to increase understanding and cooperation
- c. Align efforts and partnerships with local, state and federal public safety-related organizations to maximize efficiency and reduce duplication
- d. Continue to support the planning for and training of emergency personnel to address the safety needs during natural and manmade disasters

Future:

- e. Encourage and assist public safety agencies to be trained and equipped to address the changing demographics of the county
- f. Assess and support the construction of additional facilities to address identified needs to improve emergency response times
- g. Develop appropriate infrastructure and educational programs for bikes and pedestrians to ensure safer roads
- h. Evaluate future construction, equipment and personnel needs in light of accessibility by emergency services
- i. Support the Sherriff's office in fostering community partnerships countywide
- j. Review and revise, as needed, the emergency response protocols to make efficient use of volunteer and professional resources
- k. Support efforts to move residents toward self-sufficiency during disasters



Map 12: Transylvania County Emergency Services



Transylvania County's Land Use and Livability Objectives and Action Steps Continued

Objective 3) Promotes exceptional community facilities throughout the county (Map 13)

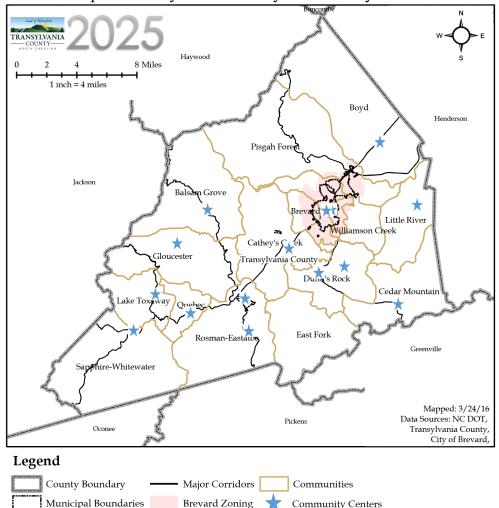
Action Steps

Current:

- a. Support the development, maintenance and planning for continual operation of a community center within each township or community
- b. Invest in necessary updates or new development of a courthouse that supports the needs of citizens
- c. Evaluate the viability of a public shooting range

Future:

- d. Ensure public buildings have strategic facilities plans that are reflective of population changes and needs
- e. Support the construction of an indoor athletic facility with a pool for year-round use by the citizens
- f. Evaluate funding mechanisms and invest in recreational sites and facilities within each township or community
- g. Support the development of additional high-quality childcare facilities throughout the county and evaluate new funding mechanisms to support preschool and early education efforts



Map 13: Transylvania County Community Centers



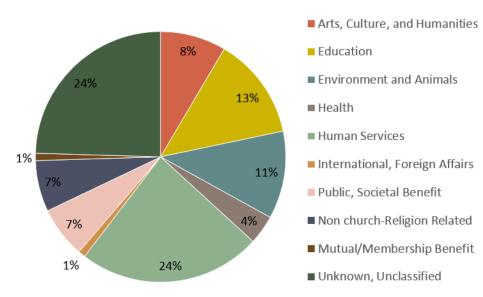
Focus Area 4: Health, Culture, and Equity

Health, Culture and Equity Assessment

Historically, people came to Transylvania County to take advantage of the clean air, clean rivers and mountains whether as tourists or for business. Tourists and residents alike still take advantage of the health, economic and recreational benefits this county provides.

The county has a rich and diverse set of cultural resources including Brevard College, the Brevard Music Center and the Transylvania Community Arts Council. Part of the county's cultural heritage is evident in the diversity of over 106 non-profits, government and religious organizations, which all contribute to identity of Transylvania County (Figure 29).

During the public outreach sessions for the development of this plan, a number of residents living outside the City of Brevard indicated they didn't think that they were receiving equal levels of service. The most common concerns were that the state maintained roads were in worse shape, access to recreational opportunities is limited, county transportation services for the elderly are inadequate and wireless coverage (and broadband) are non-existent in some areas. These issues were noted by the Planning Board members and action steps to address many of these concerns are included in this plan.



Transylvania County Non-Profit Organizations

Figure 29, Source: IRS data via Mountain Express

Health Care: The recent Transylvania County Community Health Needs Assessment (CHNA) identified the top health priorities as substance abuse, mental health and nutrition, physical activity and overweight. Addressing substance abuse is a priority because the rates in Transylvania County are higher than state averages. In Transylvania County, unintentional poisoning rates (primarily drug overdoses) are 35% higher than the rates for Western North Carolina and 1.8 times higher than North Carolina rates (CHNA). The closest overdose prevention programs are in Asheville and Franklin, NC. Additional facilities in the County or affordable and reliable access to Asheville or Franklin could reduce the prevalence of substance abuse.

The CHNA survey recorded 16% of respondents from Transylvania County experienced poor mental health in the last month and 5% reported they were unable to receive mental health care or counseling in the past year, highlighting the need to address mental health issues. The small number of facilities providing mental health services, transportation, cost, stigma and lack of resources kept Transylvania County residents from receiving mental health care. Vaya Health coordinates services in the county provided by 22 different agencies including the Transylvania Regional Hospital.

Health Behaviors Ranked 13th best out of 100	Transylvania	Top U.S.	North
counties in NC	County	Performers	Carolina
Adult smoking	23%	14%	20%
Adult obesity	24%	25%	29%
Food environment index	7.6	8.4	6.6
Physical inactivity	21%	20%	25%
Access to exercise opportunities	82%	92%	76%
Excessive drinking		10%	13%
Alcohol-impaired driving deaths	14%	14%	33%
Sexually transmitted infections	286	138	519
Teen births	36	20	42

Transylvania County 2014 Health Behavior Ranking

Table 5, Source: 2014 County Health Rankings, A Robert Wood Johnson Foundation Program

Transylvania County 2014 Physical Environment Ranking

Physical Environment Ranked 45th best out of 100 counties in NC	Transylvania County	Top U.S. Performers	North Carolina
Air pollution - particulate matter	13.1	9.5	12.3
Drinking water violations	1%	0%	4%
Severe housing problems	12%	9%	16%
Driving alone to work	82%	71%	81%
Long commute - driving alone	34%	15%	30%

Table 6, Source: 2014 County Health Rankings, A Robert Wood Johnson Foundation Program

Transylvania Regional Hospital, established in 1933, is a not-forprofit hospital associated with Mission Health System that provides a variety of services including 24-hour emergency care, inpatient and outpatient care, diagnostic procedures, surgical procedures and rehabilitation. Transylvania Regional Hospital is part of WNC Health Network, which coordinates care between hospitals and health departments in 16 western counties of NC.

Poor nutrition, low physical activity and being overweight increases the incidence of heart disease, which is the leading cause of death in Transylvania County. Almost 33% of respondents to the CHNA survey said they found it difficult or very difficult to access fresh produce at an affordable price. The City of Brevard has a growing system of interconnected sidewalks and bike paths, but other communities in the county lack the infrastructure that supports physical activity.

The 2014 NC County Health Rankings showed that Transylvania County Ranked 13th out of 100 counties for Health Behaviors (Table 5) and has better results compared to NC averages for all parameters except access to exercise opportunities, and food environment index. For physical environment, Transylvania County was ranked 45 out of 100 counties (Table 6). The conditions that reduced Transylvania County's ranking were higher amounts of air pollution, more individuals driving and long commutes to work. **Education:** Early childhood education sets the stage for the educational attainment and success in later life. According to the 2015 State of the Young Child Report, in Transylvania County there were 1,500 children between the ages of 0-5 and only 35% or 529 children were enrolled in full-time licensed childcare centers or part-time, unregulated church-based preschool programs. The average cost of infant care in Transylvania County is \$11,700 (Figure 30) or 26.6% of the median household income for Transylvania County (State of the Young Child, US Census). The cost and the availability of childcare is affecting the ability of residents to begin childhood education at an early age (Figure 35).

The K-12 public school system serves approximately 3,838 students in four elementary schools, two middle schools, two high schools, a charter school serving K-8th grades and an alternative school that serves 6-12th grades (Figure 31). Measures of student performance in English, reading, math and science show that Transylvania County is performing better than the state average. It also shows that there is room for growth in academic achievement (<u>NC DPI school report cards</u>). The Integrated Planning for School and Community Report found that the existing school buildings have the capacity to hold the existing student body as well as the projected increase in students as the population increases through 2025 (NC State University 2015).

Cost of Childhood Education Compared to Public College Tuition (Per Year)

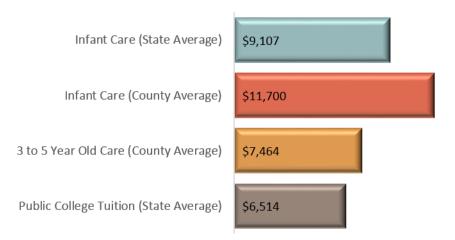


Figure 30, Source: State of the Young Child in Transylvania County

Students Served by Transylvania County Schools

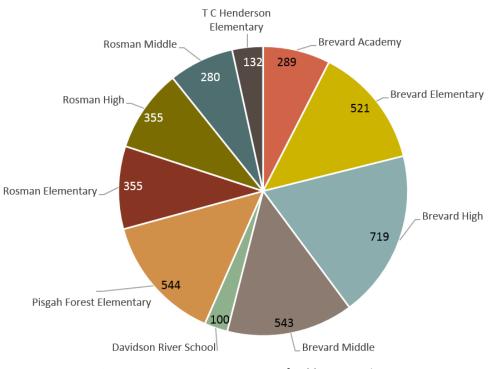


Figure 31, Source: NC Department of Public Instruction

Brevard College is a small, private, four-year, liberal arts college. The college is committed to an experiential liberal arts education that encourages personal growth and inspires artistic, intellectual, and social action. The 2015-2016 enrollment is around 705 students. The economic impact of this higher education resource is approximately \$35 million annually.

Blue Ridge Community College (BRCC) is a two-year, comprehensive postsecondary institution. Chartered in 1969, the College is one of 58 public institutions within the North Carolina Community College System and provides one of the largest continuing education programs in the state. Offering more than 100 programs of study, BRCC maintains an extensive lineup of technical programs designed to prepare students for successful careers in nursing, automotive technology, law enforcement, emergency response, engineering technology, machining technology and many others. Students who graduate from BRCC are eligible to transfer to any of North Carolina's 18 public colleges and universities. **Diversity:** Transylvania County contains great diversity in the form of cultural heritage, community character and identity, and personal expression. These attributes are not measured by the 2010 Census, but can be seen and experienced by traveling through the county. The 2010 Census measures the economic and racial diversity of the county which includes 4.1% Black or African American, 0.5% Asian, 2.9% Hispanic, 1.7% that are two or more races and the remaining 90.8% White. As the Baby Boomer generation shrinks and the current school-aged children become adults, the diversity of the county will change with a larger portion of minority residents (Figure 32). For example Hispanic or Latino students represent 6.7% of the school age population, but only 2.9% of the 2010 census population.

Transylvania County has a responsibility to ensure that everyone is treated equally when it comes to community services, recreational opportunities, medical support and economic opportunity.

2010 General Population Compared to 2015-2016 School Population

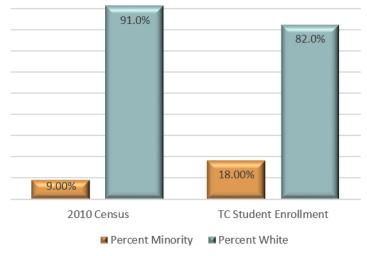


Figure 32, Source: Transylvania Schools, Us Census.gov

Arts and Culture: Transylvania County has a total of 78 arts and culture organizations that include arts, music, film, theatre, educational, historic and non-profit groups (Arts and Economic Prosperity Survey 2011). The events held by these organizations are attended by over 130,000 people and support more than 240 full time jobs. According to an economic impact 2015 study by Brevard Music Center (BMC) this number is low as the BMC impact alone is calculated at \$14.9M annually with 245 full time jobs supported by BMC. The total amount of economic activity directly tied to the arts and culture of Transylvania County ranges from approximately \$8.5 million (Arts and Economic Prosperity Survey) to \$14.9 million (Brevard Music Center 2015).

In addition to the organizations, the county has many excellent local musicians and artists that are featured on the radio and in regional shows.

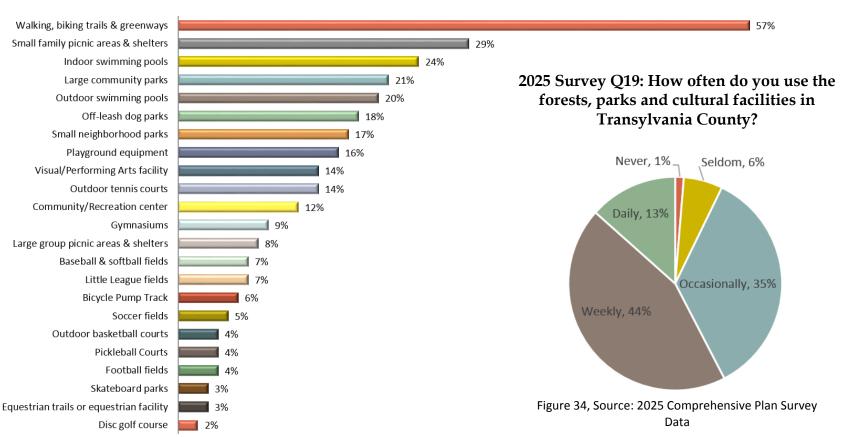
Event-Related Spending by Arts and Culture Audiences Totaled \$4.2 million (excluding the cost of admission)						
Attendance to arts and culture events	Resident* Attendees	Non-Resident* Attendees	All Cultural Audiences			
Total attendance to arts and culture events	70,768	66,645	137,413			
Percentage of total attendance	51.50%	48.50%	100%			
Average event-related spending per person	\$14.66	\$47.36	\$30.52 Total			
Event-related expenditures	\$1,037,460	\$3,156,306	\$4,193,766			
Source: Arts & Economic Prosperity IV: The Economic Impact of Nonprofit Arts and Culture						

Table 7, Note: * For the purpose of this study, residents are attendees who live within Transylvania County; *Non-residents live outside that area.

Source: Arts and Economic Prosperity Survey 2011

Recreation: The Transylvania County Parks and Recreation Department manages ten recreational facilities including parks, baseball fields, soccer fields, multi-use fields, basketball courts, tennis courts, river access points, picnic shelters and a recreation center. The City of Brevard maintains ten facilities that include parks, an outdoor public pool, a sports complex and river access points. The Town of Rosman manages a park and public pool. Combined, these recreational facilities serve the communities located close to Rosman and Brevard, and much of Transylvania County.

Transylvania County and the City of Brevard have recently hired a consultant to develop a joint Parks and Recreation Master Plan. Many of the topics identified in that plan were the same as, or complementary to the 2025 Comprehensive Plan survey responses regarding recreation and community priorities.



Parks and Recreation Facilities that are Most Important to Transylvania County Households

By percentage of respondents who selected the item as one of their top four choices.

Figure 33, Source: Leisure Vision/ETC Institute (2015) (colors modified for 2025 Comprehensive Plan) Transylvania County Parks and Recreation Master Plan

Goal: Transylvania County is an inclusive, healthy and well-rounded collection of communities and neighborhoods that all have access to the cultural, recreational, educational and service-oriented resources that support a high quality of life.

Objective 1) Values the physical and mental health of all citizens, and is recognized as a leader in Western North Carolina for actively providing access to excellent health care facilities and services

Action Steps

Current:

- a. Support citizens' health through actively promoting exercise, recreation and access to affordable and nutritious foods
- b. Partner with existing agencies to address community needs such as medical, dental and mental health
- c. Support the expansion of outreach efforts for veterans by veterans
- d. Support efforts to reduce substance abuse
- e. Support efforts to provide knowledge of local services to Transylvania County residents by networking, supporting and partnering with others to increase the effectiveness of our services and the services of community non-profits

Future:

- f. Support efforts to maintain Transylvania Regional Hospital as a full-service medical hospital
- g. Support efforts to reduce homelessness
- h. Actively seek to identify needs and encourage coordinated efforts to strengthen the family within our community

Objective 2) Recognizes and actively advocates for the diverse interests and cultures of the community and fosters cooperation between citizens and communities throughout the county, while valuing the county's rich cultural and historic heritage

Action Steps

Current:

- a. Coordinate communication efforts between Brevard, Rosman and Transylvania County governments
- b. Coordinate efforts with other agencies, jurisdictions and stakeholders throughout the county to make possible the preservation of historical and cultural resources
- c. Encourage greater civic engagement from populations with geographical and socio-economic diversity that is representative of the entire county

Future:

- d. Actively focus on community well-being by promoting communication, interaction and cooperation between the diverse segments of the county
- e. Support the various racial, religious and cultural groups that comprise Transylvania County's population
- f. Support a diverse, geographically representative and citizendriven Community Advisory Board to focus on community relations
- g. Advocate with one voice at the state and federal level for improvements that benefit the entire county, for example NC DOT



Transylvania County's Health, Culture and Equity Objectives and Action Steps Continued

Objective 3) Actively encourages and supports highquality art (music, performing, and visual) and recognizes the cultural, economic and educational impacts of these cultural resources

Action Steps

Current:

- a. Preserve the county's distinctive sense of place and small town atmosphere by supporting efforts to promote local arts, culture and heritage
- b. Help preserve and educate residents about the cultural and architectural heritage of the community
- c. Encourage local festivals, celebrations and events

Future:

d. Partner with and support the Brevard Music Center, Transylvania Community Arts Council, Brevard College and area artists to develop more outlets/venues for local artists to showcase and sell their music, art and crafts *Objective 4)* Promotes the health and well-being of its citizens, by providing and actively supporting high-quality and well maintained parks, recreational facilities, programs and services throughout the county

Action Steps

Current:

- a. Develop programming at recreational facilities to enhance physical and mental well-being of all ages and abilities
- b. Partner with public and private entities to promote multi-use trails
- c. Advocate with NC DOT to develop bike lanes, trails and pull-offs to help minimize the danger on the road between bikes and motor vehicles
- d. Advocate for the development, funding and maintenance of state and federal lands, including NC State Parks, NC Forest Service Recreation Areas, the Blue Ridge Parkway and national forests

Future:

- e. Support additional efforts from private and public entities to continue the development of the French Broad River and its tributaries as recreational and economic development venues
- f. Expand the recreational programs and facilities to capitalize on the abundant natural resources found in the county



Transylvania County's Health, Culture and Equity Objectives and Action Steps Continued

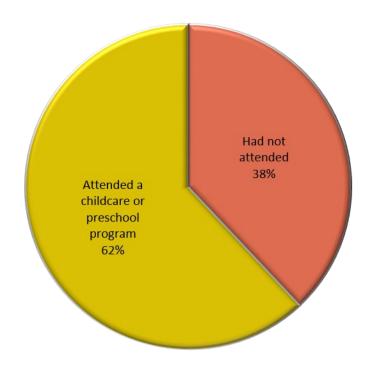
Objective 5) Supports life-long learning and personal advancement that enables the county to retain an educated workforce and maintain the high-quality of life

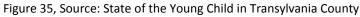
Action Steps

Current:

- a. Encourage policies and resources necessary for all students to excel
- b. Promote independent and lifelong learning opportunities through the Transylvania County Library, Blue Ridge Community College, Brevard College and other institutions
- c. Support the continuation and expansion of the small business incubator programs, internship opportunities and other skills training provided by local and regional institutions
- d. Partner with local educational institutions and other agencies to establish the county as a certified work ready community
- e. Actively support early childhood education programs and childcare resources and referral services
- f. Evaluate/assess potential funding mechanisms for the maintenance and upgrades of our educational facilities/buildings to be amongst the best in North Carolina
- g. Encourage participation in early and emergent literacy programs and kindergarten readiness programs
- h. Support the development of solutions to improve kindergarten readiness **Future:**
- i. Support and fund programs that provide resources necessary for exceptional instruction
- j. Support collaboration efforts between all public and private educational institutions in the county

Percent of Newly Enrolled Kindergarten Students for 2015-2016 Who:





References:

- (2002) Agricultural Census North Carolina County Data, pages 204-229. US Department of Agriculture, National Agricultural Statistics Service.
- (2007) Agricultural Census North Carolina County Data, page 264. US Department of Agriculture, National Agricultural Statistics Service.
- (2012) Agricultural Census County Profile Transylvania County North Carolina. US Department of Agriculture, National Agricultural Statistics Service. www.agcensus.usda.gov.
- American Fact Finder Poverty Status 2010-2014. Retrieved September 26, 2016 from: <u>https://factfinder.census.gov/faces/nav/jsf/pages/</u> <u>community_facts.xhtml#</u>
- Arts & Economic Prosperity IV (2012). The Economic Impact of Nonprofit Arts and Culture Organizations and Their Audiences in Transylvania County. Americans for the Arts (www.AmericansForTheArts.org/EconomicImpact).
- Asheville, North Carolina Region Housing Needs Assessment (2015). Bowen National Research, 155 E. Columbus Street, Ste. 220, Pickerington, Ohio 43147 Blue Ridge Bike Plan (2013). Land of Sky Regional Council. Retrieved March 18, 2016 from http://www.landofsky.org/brbp.html.
- Brevard Music Center Economic Impact Study (2015). Inhyuck "Steve" Ha. Western Carolina University submitted to Brevard Music Center 349 Andante Lane, Brevard, NC 28712.
- County Zoning (2014). David Owens. UNC School of Governments, Legal Summaries. Retrieved June 15 from https://www.sog.unc.edu/sites/ www.sog.unc.edu/files/County%2520zoning%25202014-9.pdf
- DuPont State Forest Land and Resource Management Plan (2011). Brian Schneider. NC Division of Forest Resources, 1616 Mail Service Center, Raleigh, NC 27699-1616.
- Economic Types Show a Changing Rural Landscape (2015). US Department of Agriculture. Retrieved May 18, 2016 from http://www.ers.usda.gov/amberwaves/2015-december/updated-ers-county-economic-types-show-a-changing-rural-landscape.aspx#.V7sDNmddFwU.
- Forestry Impacts Transylvania County NC (2014). James Jeuck, Robert Bardon, Dennis Hazel and Corey Sugerik, NC State University, Raleigh, NC.
- Integrated Planning for School and Community (IPSAC) Land Use Study—Transylvania County Schools (2015). Institute for Transportation Research and Education. NC State University, Raleigh, NC.
- Inventory of the Natural Areas of Transylvania County, North Carolina (2008). Edward Schwartzman, Department of Environment and Natural Resources, Office of Natural Resource Planning and Conservation, North Carolina Natural Heritage Program, 217 West Jones Street, Raleigh, NC 27699-1651.
- McGill and Associates (2015). 55 Broad Street, Asheville, NC 28801.
- North Carolina's Bicycle and Pedestrian Plan (2013). North Carolina Department Of Transportation. Retrieved July 7, 2016 from walkbikenc.com.
- North Carolina County Health Rankings (2014). Robert Wood Johnson Foundation. Retrieved January 20, 2016 from http://www.countyhealthrankings.org/ app/north-carolina/2016/rankings/transylvania/county/outcomes/overall/snapshot.
- North Carolina Wildlife Action Plan (2015). North Carolina Wildlife Resources Commission, Raleigh, NC. Retrieved from http://www.ncwildlife.org/plan.aspx.
- Transylvania County Population Projections 2020-2030 (2016). North Carolina Office of State Budget and Management. Retrieved from http://
 - www.osbm.nc.gov/demog/county-projections.
- United States Census Bureau. Retrieved from https://www.census.gov/.



Transylvania County Planning and Community Development Department 98 East Morgan Street Brevard, NC 28712 828-884-3205 planning.transylvaniacounty.org