Category/Layer Name	Description	Source	Date
FOOD SYSTEM ASSETS			
Direct Markets	Location of farmers markets and roadside stands.	Appalachian Sustainable Agriculture Project (ASAP) Local Food Guide	2015
Food Infrastructure	Layer displaying locations of businesses that serve as intermediary steps in local food supply chains, including value-added processors (i.e., meat and seafood processors, cheese manufacturers, specialty jams and pickling operations), fresh produce wholesaler/distributors, multi-farm CSA's, food hubs, community kitchens, incubator farms, and cold storage locations. Does not include information on end retailers (e.g., restaurants, groceries, etc. selling local foods to consumers).	Center for Environmental Farming Systems, NC Local Food Infrastructure Inventory. http://www.cefs.ncsu.edu/statewide-infrastructure-map.html.	12/29/14
Appalachian Grown Farms and Businesses, by ZIP Code	The number of Appalachian Grown farms and businesses in each regional ZIP code.	Appalachian Sustainable Agriculture Project (ASAP) private database	2015
Proportion of Farms with Direct Sales, 2012	Percentage of the number of farms selling agricultural products directly to individuals for human consumption to the total number of farms, by county.	USDA Census of Agriculture	2012
Percent Change in Farmland Acres, 2007–2012	Percentage change in the acres of land in farms, by county, from 2007 to 2012.	USDA Census of Agriculture	2012
Diabetes Rate, 2011	Percentage of the population diagnosed with diabetes, by county. Data is from the National Health Interview Survey. Statistical analysis by the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation.	U.S. Centers for Disease Control and Prevention, National Center for Health Statistics	2011
Obesity Rate, 2011	Percentage of the population that is obese, by county. Data is from the U.S. Census Bureau's Population Estimates Program.	U.S. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System	2011
Population Employed in Food Industry	The percentage of the population working in the food industry (annual average employment in food services and drinking places [2013] + total farm operators [2012]), by county. The total workforce used for the calculation is the population age 16 years and over employed in the civilian labor force (2013).	Workforce: U.S. Census Bureau; Annual Average Employment in Food Services and Drinking Places: U.S. Bureau of Labor Statistics; Total Farm Operators: USDA Census of Agriculture	2012 / 2013
Percent of Population Below Poverty Level, by Census Tract	The percentage of the population living below the poverty level, by county, in 2012. Data is from the American Community Survey, 5-Year Estimates.	U.S. Census Bureau, ACS 2009-2013, S1701	2009-2013
Food Deserts, by Census Tract	Census tracts qualify as food deserts if they meet low-income and low-access thresholds: (1) they qualify as "low-income communities," based on having: (a) a poverty rate of 20 percent or greater, OR (b) a median family income at or below 80 percent of the area median family income; AND (2) they qualify as "low-access communities," based on the determination that at least 500 persons and/or at least 33 percent of the census tract's population live more than one mile from a supermarket or large grocery store (10 miles, in the case of non-metropolitan census tracts).	USDA Economic Research Service Food Access Research Atlas	2010
USDA SNAP Businesses, 2011	Location of Supplemental Nutrition Assistance Program (SNAP)-approved business locations.	USDA Food and Nutrition Service	2011
Full-Service Restaurants per 1,000 Population	The number of full-service restaurants per 1,000 population, by county.	WNC Vitality Index	2009
Grocery Stores per 1,000 Population	The number of grocery stores per 1,000 population, by county.	WNC Vitality Index	2009
Agriculture Supportive Lands	Supporting agricultural lands were identified using the output of the Living Lands and Communities agricultural suitability model, which included a variety of factors including soils, slope, present use, land cover, etc.	LandDesign	
Cropland Data Layer, 2013	The USDA's Cropland Data Layer shows crops in place during the main growing season for 2013.	USDA National Agricultural Statistics Service	2013
POLITICAL BOUNDARIES AND LOCATIONS			
Census Block Groups 2010		NCOneMap	2010
Census Blocks 2010		NCOneMap	2010
Census Tracts 2010		NCOneMap	2010
Communities Incorporated	Communities that are actually incorporated, are defined by a municipal boundary, and have their own local government. They are a legally bound entity and typically consist of a city, borough, town, or village.	Esri	2012
Communities Other	Communities that are not incorporated, but are recognized by the US Census Bureau as a statistical entity. They are a concentration of population, housing, and commercial strutures, identifiable by name. These communities often have their own post office.	Esri	2012
County Boundaries		NCOneMap	2012
County Seats		Esri	2012
Federal Lands		NCOneMap	2012
Municipal Boundaries		NCOneMap	2012
Populated Places	A community of any size or legal distinction recognized as being a local concentration of some amount of population. These could include large incorporated cities or small road intersections. Many of these are already included in the Communities Incorporated and Communities Other layers.	Esri	2012
State Owned Lands		NCOneMap	2012
Urban Areas	A Urban Area consists of contiguous, densely settled census block groups and census blocks that meet minimum population density requirements, along with adjacent densely settled census blocks that together encompass a population of at least 50,000 people.	Esri	2012
ZIP Codes		Esri	2012
BUILT			
Infrastructure			
Appalachian Trail Parking		Appalachian Trail Conservancy	2012
Appalachian Trail Shelters		Appalachian Trail Conservancy	2012
Dams All	All dams regardless of use or type. This map layer portrays major dams of the United States, including Puerto Rico and the U.S. Virgin Islands. The map layer was created by extracting dams 50 feet or more in height, or with a normal storage capacity of 5,000 acre-feet or more, or with a maximum storage capacity of 25,000 acre-feet or more, from the 79,777 dams in the U.S. Army Corps of Engineers National Inventory of Dams.	National Atlas of the United States	2010
EMS Locations	EMS refers to Emergency Medical Services.	NCOneMap	2012
Fire Stations		NCOneMap	2012
Fire and EMS – 5 Min Drive Time	EMS refers to Emergency Medical Services. This is a modeled layer showing the 5-minute drive times from each EMS location or fire station.	UNC Asheville's NEMAC	2012
Hydro Dams	This is a subset of the Dams All layer, showing only the dams that are used for power generation. See Dams All layer for a more detailed description of the layer.	National Atlas of the United States	2010
Water Tanks	This data contains information on water distribution tanks as defined by North Carolina Rural Economic Development Center and includes tank ID, area name, original construction year, latest renovation, type of tank, tank utilization, construction material, bottom elevation, overflow elevation, tank capacity. Other coverages exist with water lines and other appurtenances.	NCOneMap	2012
Land			
Managed Areas	The North Carolina Natural Heritage Program's (NHP) Managed Areas shapefile is primarily a collection of fee simple properties and easements where conservation is one of the management goals. It does include a number of properties and easements that are not primarily managed for conservation, but that are of conservation interest. This conservation interest ranges from properties and easements that support rare species and intact, high-quality natural communities to those that are open spaces in places where open space is scarce. The property and easement boundaries in this shapefile were acquired from a wide variety of sources, and in some cases their boundaries are approximate.	NCOneMap	2012
Protected Lands	This dataset represents land owned by the federal government in North Carolina. This is a subset of the North Carolina Natural Heritage Program's Managed Areas. See the Managed Areas layer for a more detailed description of the layer.	NCOneMap	2012
Tree Cover	A subset of the 2006 Land Cover dataset that shows only the three classes coded as trees, which includes deciduous forest, evergreen forest, and mixed forest.	Multi-Resolution Land Characteristics Consortium	2006
Risks, Hazards,and Stressors			
Brownfield Sites	This dataset represents the location of sites with a completed Brownfields Agreement as recorded in the NC DENR Division of Waste Management Brownfields Program database. The Program is authorized by the state statute Brownfields Property Reuse Act.	NCOneMap	2012
Hazardous Waste Sites	This dataset represents the location of sites within North Carolina that are regulated by the hazardous waste portions of the Resource Conservation and Recovery Act (RCRA). This includes Large Quantity Generators, Small Quantity Generators, Transporters of Hazardous Waste, permitted treatment, storage, or disposal (TSD) facilities, and TSD facilities that are under an Order or a Consent Agreement. (Note: Facilities that are Conditionally Exempt Small Quanitity Generators may also be included if they are also a Transporter or TSD facility.) The data is extracted from the EPA RCRAInfo database. The State of North Carolina, Division of Waste Management, Hazardous Waste Section is the implementer of record for this data.	NCOneMap	2012
Housing Density 2000	This data layer was created by Dave Theobald to predict the effects of landscape change, especially the wildland-urban interface and land use change. It shows the full gradient or predicted range of housing density, from rural to urban areas. This is important particularly in understanding patterns of development and urbanization trends beyond the urban fringe into exurban areas.	Colorado State University	2007

Category/Layer Name	Description	Source	Date
Housing Density 2030	This data layer was created by Dave Theobald to predict the effects of landscape change, especially the wildland-urban interface and land use change. It shows the full gradient or predicted range of housing density, from rural to urban areas. This is important particularly in understanding patterns of development and urbanization trends beyond the urban fringe into exurban areas.	Colorado State University	2007
Impervious Surfaces 2006	A subset of the 2006 Land Cover dataset that shows only the four classes coded as impervious surfaces, which include developed/open space, developed/low intensity, developed/medium intensity, and developed/high intensity.	Multi-Resolution Land Characteristics Consortium	2006
Land Cover 2006	The National Land Cover Database (NLCD) serves as the definitive Landsat-based, 30-meter resolution, land cover database for the nation. NLCD provides spatial reference and descriptive data for characteristics of the land surface such as thematic class (for example, urban, agriculture, and forest), percent impervious surface, and percent tree canopy cover. NLCD supports a wide variety of federal, state, local, and nongovernmental applications that seek to assess ecosystem status and health, understand the spatial patterns of biodiversity, predict effects of climate change, and develop land management policy. NLCD products are created by the Multi-Resolution Land Characteristics (MRLC) Consortium, a partnership of federal agencies led by the U.S. Geological Survey.	Multi-Resolution Land Characteristics Consortium	2006
Land Use 1976	Using the calibrated and normalized Landsat satellite images from 1976, 1985, 1995, and 2006, we classified the imagery into developed and undeveloped categories at a resolution of 0.22 acres, or a 30 X 30 meter pixel. Development forecasts were completed at five year time steps from 2010–2030. Current population projections extend only to the year 2030, making development forecasts past this point increasingly uncertain. Future development patterns were mapped for each county using a dynamic urban growth model that allocates development to undeveloped cells based on their development potential.	UNC-Charlotte's Center for Applied Geographic Information Science	2010
Land Use 1985	Using the calibrated and normalized Landsat satellite images from 1976, 1985, 1995, and 2006, we classified the imagery into developed and undeveloped categories at a resolution of 0.22 acres, or a 30 X 30 meter pixel. Development forecasts were completed at five year time steps from 2010–2030. Current population projections extend only to the year 2030, making development forecasts past this point increasingly uncertain. Future development patterns were mapped for each county using a dynamic urban growth model that allocates development to undeveloped cells based on their development potential.	UNC-Charlotte's Center for Applied Geographic Information Science	2010
Land Use 1996	Using the calibrated and normalized Landsat satellite images from 1976, 1985, 1995, and 2006, we classified the imagery into developed and undeveloped categories at a resolution of 0.22 acres, or a 30 X 30 meter pixel. Development forecasts were completed at five year time steps from 2010–2030. Current population projections extend only to the year 2030, making development forecasts past this point increasingly uncertain. Future development patterns were mapped for each county using a dynamic urban growth model that allocates development to undeveloped cells based on their development potential.	UNC-Charlotte's Center for Applied Geographic Information Science	2010
Land Use 2006	Using the calibrated and normalized Landsat satellite images from 1976, 1985, 1995, and 2006, we classified the imagery into developed and undeveloped categories at a resolution of 0.22 acres, or a 30 X 30 meter pixel. Development forecasts were completed at five year time steps from 2010–2030. Current population projections extend only to the year 2030, making development forecasts past this point increasingly uncertain. Future development patterns were mapped for each county using a dynamic urban growth model that allocates development to undeveloped cells based on their development potential.	UNC-Charlotte's Center for Applied Geographic Information Science	2010
Land Use 2010	Using the calibrated and normalized Landsat satellite images from 1976, 1985, 1995, and 2006, we classified the imagery into developed and undeveloped categories at a resolution of 0.22 acres, or a 30 X 30 meter pixel. Development forecasts were completed at five year time steps from 2010–2030. Current population projections extend only to the year 2030, making development forecasts past this point increasingly uncertain. Future development patterns were mapped for each county using a dynamic urban growth model that allocates development to undeveloped cells based on their development potential.	UNC-Charlotte's Center for Applied Geographic Information Science	2010
Land Use 2015	Using the calibrated and normalized Landsat satellite images from 1976, 1985, 1995, and 2006, we classified the imagery into developed and undeveloped categories at a resolution of 0.22 acres, or a 30 X 30 meter pixel. Development forecasts were completed at five year time steps from 2010–2030. Current population projections extend only to the year 2030, making development forecasts past this point increasingly uncertain. Future development patterns were mapped for each county using a dynamic urban growth model that allocates development to undeveloped cells based on their development potential.	UNC-Charlotte's Center for Applied Geographic Information Science	2010
Land Use 2020	Using the calibrated and normalized Landsat satellite images from 1976, 1985, 1995, and 2006, we classified the imagery into developed and undeveloped categories at a resolution of 0.22 acres, or a 30 X 30 meter pixel. Development forecasts were completed at five year time steps from 2010–2030. Current population projections extend only to the year 2030, making development forecasts past this point increasingly uncertain. Future development patterns were mapped for each county using a dynamic urban growth model that allocates development to undeveloped cells based on their development potential.	UNC-Charlotte's Center for Applied Geographic Information Science	2010
Land Use 2025	Using the calibrated and normalized Landsat satellite images from 1976, 1985, 1995, and 2006, we classified the imagery into developed and undeveloped categories at a resolution of 0.22 acres, or a 30 X 30 meter pixel. Development forecasts were completed at five year time steps from 2010–2030. Current population projections extend only to the year 2030, making development forecasts past this point increasingly uncertain. Future development patterns were mapped for each county using a dynamic urban growth model that allocates development to undeveloped cells based on their development potential.	UNC-Charlotte's Center for Applied Geographic Information Science	2010
Land Use 2030	Using the calibrated and normalized Landsat satellite images from 1976, 1985, 1995, and 2006, we classified the imagery into developed and undeveloped categories at a resolution of 0.22 acres, or a 30 X 30 meter pixel. Development forecasts were completed at five year time steps from 2010–2030. Current population projections extend only to the year 2030, making development forecasts past this point increasingly uncertain. Future development patterns were mapped for each county using a dynamic urban growth model that allocates development to undeveloped cells based on their development potential.	UNC-Charlotte's Center for Applied Geographic Information Science	2010
Public Landfills		NCOneMap	2012
Transportation			
Abandoned Railroads	A subset of the Railroads layer showing lines that are no longer in service.	NCOneMap	2012
Airports		NCOneMap	2012
Appalachian Trail		Appalachian Trail Conservancy	2012
Blue Ridge Parkway		NCDOT	2012
Interstates		NCDOT	2012
Major Roads		NCDOT	2012
Railroads		NCOneMap	2012
ECONOMIC			
Businesses			
Percent of Population Below Poverty Level		U.S. Census Bureau, ACS 2009-2013, S1701	2009-2013
Gas Stations		NCOneMap	2012
USDA SNAP Businesses	Layer showing the location of Supplemental Nutrition Assistance Program (SNAP)-approved business locations.	USDA's Food and Nutrition Service	2011
HUMAN			
Population Density			
Population Density 5 County	Total population / Total area (sq. miles)	U.S. Census Bureau, ACS 2010, DP-1	2010
Population Density WNC	Total population / Total area (sq. miles)	U.S. Census Bureau, ACS 2010, DP-1	2010
Culture			
Game Lands	The North Carolina Department of Environment and Natural Resources, Wildlife Resources Commission (WRC), and the NC Center for Geographic Information and Analysis developed the GIS dataset WRC Game Lands to enhance management and planning, citing, and impact analysis in areas directly affecting WRC Game Lands. The North Carolina Wildlife Resources Commission assumed sole responsibility for all updates to the dataset after the May 1999 update. The current updates enable the user to identify all publicly-owned Game Lands managed by the NC Wildlife Resources Commission.	NCOneMap	2012
Key Locations and Parks	Point locations that have common recreational landmarks, including golf courses, amusement parks, beaches, and park and recreation areas.	Esri	2012
Mountain Peaks		Esri	2012
Mountain Peaks 3000ft	A subset of the Mountain Peaks layer that includes only mountain peaks with an elevation of 3000 feet or greater.	Esri	2012
Public Trout Rivers		NCOneMap	2012
Education			

Category/Layer Name	Description	Source	Date
All Schools – 0.5 mile Buffer	The combined schools layer buffered by 1/2 mile.	NEMAC	2012
Colleges Universities		NCOneMap	2012
Private Schools		NCOneMap	2012
Public Schools		NCOneMap	2012
Health			
Healthcare Facilities – 5 min Drive Time	Drive time (5 minutes) calculated from inpatient and outpatient healthcare facilities identified from employment data provided by Land of Sky Regional Council.	LandDesign	2012
Hospitals		NCOneMap	2012
Hospitals – 10 min Drive Time	Drive time (10 minutes) calculated from major medical facilities in the region.	LandDesign	2012
Medical Facilities		NCOneMap	2012
Public Health Centers		NCOneMap	2012
NATURAL			
Ecosystems			
Significant Natural Heritage Areas	The Significant Natural Heritage Areas (SNHA) shapefile identifies terrestrial and aquatic sites that are of special biodiversity significance. SNHA significance may be due to the presence of rare species, exemplary natural communities, or important animal assemblages. These conservation targets are referred to collectively as "elements" of biodiversity. The boundaries are drawn by Natural Heritage Program staff, based on field surveys conducted by NHP staff and other professional biologists.	NCOneMap	2012
Geology			
Geologic Faults	The North Carolina Department of Environment, Health, and Natural Resources, Division of Land Resources, NC Geological Survey, in cooperation with the North Carolina Center for Geographic Information and Analysis, developed the GIS dataset version of the Geology of North Carolina. The data represents the digital equivalent of the official State Geology map (1:500,000-scale), but was digitized from (1:250,000-scale) base maps.	NCOneMap	2012
Geology	The North Carolina Department of Environment and Natural Resources, Division of Land Resources, NC Geological Survey, in cooperation with the North Carolina Center for Geographic Information and Analysis, developed the GIS dataset version of the Geology of North Carolina. The data represents the digital equivalent of the official State Geology map (1:500,000- scale), but was digitized from (1:250,000-scale) base maps. There are two additional datasets that accompany this layer: dikes and structures. These should be used together with the Geology formations layer.	NCOneMap	2012
Landslide Locations		NCOneMap	2012
Topography			
Eastern Continental Divide		United States Geological Survey	2008
Elevation		NCDOT	2007
Slope		NCDOT	2007
Terrain		NCDOT	2007
Viewsheds AT BRP	Viewsheds of the Appalachian Trail and the Blue Ridge Parkway, based on a viewshed analysis conducted by the project team (lands within 5 miles and viewable were identified). The "viewshed" is the area visible to the human eye from a particular vantage point.	LandDesign	2012
Water			
Floodplains 500yr	The 500-year floodplain layer shows areas where there is a .2% chance of flood occuring each year.	North Carolina Floodplain Mapping Program	2010
HQW ORW	The region's "High Quality Waters" and "Outstanding Resource Waters" pursuant to the North Carolina Department of Environment and Natural Resources' definitions.	NCOneMap	2012
Impaired 303D Streams	Streams included on North Carolina's list of impaired waters required by Section 393(d) of the Clean Water Act. This dataset is dated 2012.	NCOneMap	2012
Major Lakes		NCOneMap	2012
Major Rivers		NCOneMap	2012
Streams		NCOneMap	2012
Water Supply Watersheds	The Water Supply Watersheds dataset should be used in conjunction with water quality classifications to identify areas were water supply watershed protection programs are required. Not all areas are strictly watersheds, but stop at an upstream limit that is not a complete drainage area delineation.	NCOneMap	2012
Waterbodies	Layer showing all waterbodies regardless of size, including lakers, ponds, reservoirs, and other impoundments.	North Carolina Floodplain Mapping Program	2010
Watersheds 12 Digit	This dataset is a complete digital hydrologic unit boundary layer to the Subwatershed (12-digit) 6th level for the State of North Carolina. The Watershed and Subwatershed hydrologic unit boundaries provide a uniquely identified and uniform method of subdividing large drainage areas. The smaller sized 6th level sub-watersheds (up to 40,000 acres) are useful for numerous application programs supported by a variety of local, state, and federal agencies. This dataset is intended to be used as a tool for water resource management and planning activities, particularly for site-specific and localized studies requiring a level of detail provided by large-scale map information.	NCOneMap	2012
Watersheds 8 Digit	Hydrologic unit boundaries define the aerial extent of surface water drainage to a point. Hydrologic units through four levels were created in the 1970s and have been used extensively throughout the United States. During that time, the U.S. Geological Survey (USGS) developed a hierarchical hydrologic unit code (HUC) for the United States. This system divides the country into 21 Regions, 222 Subregions, 352 Accounting Units, and 2,149 Cataloging Units based on surface hydrologic features. The smallest USGS unit (8-digit HU) is approximately 448,000 acres.	United States Geological Survey	2007
Wetlands	This dataset represents the extent, approximate location, and type of wetlands and deepwater habitats in the United States and select U.S. trust territories.	United States Fish and Wildlife Service	2007
Weather and Climate			
Avg Annual Max Temp 1981-2010	Monthly 30-year “normal” dataset covering the conterminous US, averaged over the period 1981-2010. This layer indicates the average maximum temperature for the period of record.	PRISM Climate Group	2011
Avg Annual Min Temp 1981-2010	Monthly 30-year “normal” dataset covering the conterminous US, averaged over the period 1981-2010. This layer indicates the average minimum temperature for the period of record.	PRISM Climate Group	2011
Avg Annual Precip 1981-2010	Monthly 30-year “normal” dataset covering the conterminous US, averaged over the period 1981-2010. This layer indicates the average precipitation for the period of record.	PRISM Climate Group	2011
Avg Annual Precip, Mar-Aug 1981-2010	Monthly 30-year “normal” dataset covering the conterminous US, averaged over the period 1981-2010. This layer indicates the average precipitation during the typical wet season for the period of record.	PRISM Climate Group	2011
Avg Annual Precip, Sept-Feb 1981-2010	Monthly 30-year “normal” dataset covering the conterminous US, averaged over the period 1981-2010. This layer indicates the average precipitation during the typical dry season for the period of record.	PRISM Climate Group	2011