# Community - Conservation Assessment Tool

## Model Criteria
## May 4, 2017

| Issue Category | Issue | Tool Tip | Data (Description, Date, Resolution) | Data Source | Methodology |
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| | | | **6** | **7** | |
| **Economic Potential** | | | | | |
| | Access to Markets | Travel time to major airport | **Access to Markets, 2016** Travel time in minutes from nearest major airport ranges from 2 minutes to 400+ minutes. | Headwaters Economics  Rasker, R., P.H. Gude, J.A. Gude, J. van den Noort. 2009. The economic importance of air travel in high-amenity rural areas. Journal of Rural Studies 25(2009):343-353. | This model apportions the travel time in minutes from the nearest major airport to each area.  Areas are scored using natural breaks to classify the travel time in minutes from the nearest major airport from 1 to 5 inreasing in minutes. |
| | Jobs in Travel and Tourism | Percentage of jobs in travel and tourism | **Jobs in Travel and Tourism, 2013** Consists of sectors that provide goods and services to visitors to the local economy, as well as to the local population.  These industries are: retail trade; passenger transportation; arts, entertainment, and recreation; and accommodation and food.  It is not known, without additional research such as surveys, what exact proportion of the jobs in these sectors is attributable to expenditures by visitors, including business and pleasure travelers, versus by local residents.  Some researchers refer to these sectors as "tourism-sensitive."  They could also be called "travel and tourism-potential sectors" because they have the potential of being influenced by expenditures by non-locals.  In this report, they are referred to as "industries that include travel and tourism." | U.S. Department of Commerce. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. | This model apportions the percentage of jobs in travel and tourism to each area.  Areas are scored using natural breaks to classify the percent of jobs in travel and tourism from 1 to 5 increasing in percentage. |
| | Median Household Income | Median Household Income 2010-2014 | **Median Household Income, 2010-2014** Median household income ranges from $8,800 to $215,000. | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the median household income to each area.  Areas are scored using natural breaks to classify the median household income from 1 to 5 increasing in amount. |
| | Net Migration | In migration minus out migration | **Net Migration Rate, 2000-2014** Net migration (in-migration minus out-migration) per 1000 people averaged from 2000 - 2014 | U.S. Department of Commerce. Census Bureau, Population Division, Washington, D.C. | This model apportions the average net migration rate to each area.  Areas are scored using natural breaks to classify the average net migration rate from 1 to 5 increasing in amount. |
| | High Education Attainment | Percentage of population with more than a high school educaton | **Educational Attainment, 2010-2014** The level of education completed by people 25 years and over in terms of the highest degree or the highest level of schooling completed. | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the percentage of population with greater than a high school degree to each area.  Areas are scored using natural breaks to classify the percent of jobs in travel and tourismpopulation with greater than a high school degree from 1 to 5 increasing in percentage. |
| **Health Vulnerability** | | Exposure to environmental polution | | | |
| | Lead Paint | Percentage of population exposed to high lead levels | **EPA EJSCREEN High Lead Level, 2016** EJSCREEN is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators.  Data is reported at the census block group level of geography.  Percent of housing units built pre-1960, as indicator of potential lead paint exposure. Calculated based on Census/ACS data. | US Environmental Protection Agency https://www.epa.gov/ejscreen | This model apportions the percentage of population exposed to high lead levels to each area.  Areas are scored using natural breaks to classify the percent population exposed to high lead levels from 1 to 5 increasing in percentage. |
| | Ozone | Percentage of population exposed to high ozone levels | **EPA EJSCREEN Ozone Level, 2016** EJSCREEN is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators.  Data is reported at the census block group level of geography.  Ozone summer seasonal avg. of daily maximum 8-hour concentration in air in parts per billion (2012) | US Environmental Protection Agency https://www.epa.gov/ejscreen | This model apportions the percentage of population exposed to high ozone levels to each area.  Areas are scored using natural breaks to classify the percent population exposed to high ozone levels from 1 to 5 increasing in percentage. |
| | Air Particulates | Percentage of population exposed to high particulate matter composed of particles smaller than 2.5 microns | **EPA EJSCREEN Particulate Matter, 2016** EJSCREEN is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators.  Data is reported at the census block group level of geography.  PM2.5 levels in air, µg/m3 annual avg. (2012) | US Environmental Protection Agency https://www.epa.gov/ejscreen | This model apportions the percentage of population exposed to high particulate matter to each area.  Areas are scored using natural breaks to classify the percent population exposed to high particulate matter from 1 to 5 increasing in percentage. |
| | Superfund Sites | Percentage of population exposed to National Priorities List Superfund Program sites | **EPA EJSCREEN Ozone Level, 2016** EJSCREEN is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators.  Data is reported at the census block group level of geography.  Count of proposed and listed NPL sites within 5 km (or nearest one beyond 5 km), each divided by distance in kilometers.  Calculated from EPA CERCLIS database, retrieved 10/30/2015 http://cumulis.epa.gov/supercpad/cursites/srchsites.cfm | US Environmental Protection Agency https://www.epa.gov/ejscreen | This model apportions the percentage of population exposed to EPA National Priorities List Superfund Program sites to each area.  Areas are scored using natural breaks to classify the percent population exposed to EPA National Priorities List Superfund Program sites from 1 to 5 increasing in percentage. |
| | Hazardous Sites | Percentage of population exposed to Risk Management Plan sites | **EPA EJSCREEN Risk Management Plan Sites, 2016** EJSCREEN is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators.  Data is reported at the census block group level of geography.  Count of RMP (potential chemical accident management plan) facilities within 5 km (or nearest one beyond 5 km), each divided by distance in kilometers.  Calculated from EPA RMP database, retrieved 12/2015.  "RMP facilities" are those facilities required by the Clean Air Act to file risk management plans. | US Environmental Protection Agency https://www.epa.gov/ejscreen | This model apportions the percentage of population exposed to risk management plan sites to each area.  Areas are scored using natural breaks to classify the percent population exposed to risk management plan sites from 1 to 5 increasing in percentage. |

| | Indicator | Description | Data Source | Source/Agency | Model |
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| | Hazardous Storage | Percentage of population exposed to Hazardous Material Treatment Storage and Disposal Facilities | EPA EJSCREEN Hazardous Material Treatment Storage & Disposal Facilities, 2016. EJSCREEN is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. Data is reported at the census block group level of geography.<br><br>The EPA has developed Subtitle C regulations governing hazardous waste generation, transportation, and the several hundred active treatment, storage or disposal facilities (TSDFs). Count of TSDFs (hazardous waste management facilities) within 5 km (or nearest beyond 5 km), each divided by distance in kilometers. | US Environmental Protection Agency https://www.epa.gov/ejscreen | This model apportions the percentage of population exposed to hazardous material treatment storage and disposal facilities to each area.<br><br>Areas are scored using natural breaks to classify the percent population exposed to hazardous material treatment storage and disposal facilities from 1 to 5 increasing in percentage. |
| | Water Discharge Proximity | Percentage of population exposed to highly-contaminated water discharge point sources | EPA EJSCREEN Proximity to Major Direct Water Dischargers, 2016. EJSCREEN is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. Data is reported at the census block group level of geography.<br><br>Count of NPDES major direct water discharger facilities within 5 km (or nearest one beyond 5 km), each divided by distance in kilometers. Calculated from EPA PCS/ICIS database, retrieved 11/2015 http://www.epa.gov/enviro/facts/pcs-icis/search.html | US Environmental Protection Agency https://www.epa.gov/ejscreen | This model apportions the percentage of population exposed to highly contaminated water discharge sources to each area.<br><br>Areas are scored using natural breaks to classify the percent population exposed to highly contaminated water discharge sources from 1 to 5 increasing in percentage. |
| **Natural Resource Amenities** | | High quality natural resources for ecological values and recreation | | | |
| | National and Historic Trails | Miles of National Scenic Byways, Long Distance and Historic Trails within a 25-mile radius | National Scenic Byways, 2015. The National Scenic Byways Program, administered by the U.S. Department of Transportation, Federal Highway Administration recognizes, preserves and enhances selected routes throughout the United States. There are 151 of these distinctive routes designated by the U.S. Secretary of Transportation according to certain archaeological, cultural, historic, natural, recreational and scenic qualities. America's Byways® include National Scenic Byways and All-American Roads. Since 1992, the National Scenic Byways Program has funded highway projects in 52 states and territories valued at $387,715,878.<br><br>USFS National Historic and National Scenic Trails, 2016. This dataset contains selected National Historic and National Scenic Trails. These trails are those where collaborative LWCF projects are located.<br><br>NPS Long Distance Trails, National trails are officially established under the authorities of the National Trails System Act (16 USC 1241-51). There are several types:<br><br>National scenic trails are 100 miles or longer, continuous, primarily non-motorized routes of outstanding recreation opportunity. Such trails are established by Act of Congress.<br><br>National historic trails commemorate historic (and prehistoric) routes of travel that are of significance to the entire Nation. They must meet all three criteria listed in Section 5(b)(11) of the National Trails System Act. Such trails are established by Act of Congress.<br><br>National recreation trails, also authorized in the National Trails System Act, are existing regional and local trails recognized by either the Secretary of Agriculture or the Secretary of the Interior upon application. | US Department of Transportation Federal Highway Administration<br><br>US Forest Service http://data.fs.usda.gov/geodata/edw/edw_resources/meta/S_USA.National_Trails.xml<br><br>National Park Service https://www.nps.gov/nts/maps.html | This model merges National Scenic Byways, NPS Long Distance Trails, and USFS Historic and Scenic Trails then tabulates the total miles within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the scenic byways and trails from 1 to 5 increasing in total miles. |
| | Pristine Waters | Miles of streams not identified as impaired by EPA 303(d) within a 25-mile radius | USGS National Hydrography Dataset Medium Resolution, 2017. The USGS National Hydrography Dataset (NHD) Downloadable Data Collection from The National Map (TNM) is a comprehensive set of digital spatial data that encodes information about naturally occurring and constructed bodies of surface water (lakes, ponds, and reservoirs), paths through which water flows (canals, ditches, streams, and rivers), and related entities such as point features (springs, wells, stream gages, and dams).<br><br>EPA 303(d) Listed Impaired Waters, 2015. Under Section 303(d) of the CWA, states, territories, and authorized tribes (referred to here as states) are required to develop lists of impaired waters. These are waters that are too polluted or otherwise degraded to meet the state water quality standards. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop TMDLs for these waters. | US Geological Survey https://nhd.US Geological Survey.gov/<br><br>US Environmental Protection Agency https://www.epa.gov/waterdata/waters-geospatial-data-downloads | This model selects NHD Flowlines that are not identified by the EPA as impaired waters then tabulates the total miles within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the pristine streams from 1 to 5 increasing in total miles. |
| | Public Lands | Acres of public lands within a 25-mile radius | USGS Protected Areas Database (PADUS), 2016. The USGS Protected Areas Database of the United States (PAD-US) is the nation's inventory of protected areas, including public open space and voluntarily provided, private protected areas, identified as an A-16 National Geospatial Data Asset in the Cadastral Theme (http://www.fgdc.gov/ngda-reports/NGDA_Datasets.html). PAD-US is an ongoing project with several published versions of a spatial database of areas dedicated to the preservation of biological diversity, and other natural, recreational or cultural uses, managed for these purposes through legal or other effective means. The geodatabase maps and describes public open space and other protected areas. | US Geological Survey http://gapanalysis.US Geological Survey.gov/padus/data/download/ | This model extracts open and restricted access lands, including Federal, State, and Local lands from the Protected Areas Database and tabulates the total acreage within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the protected areas from 1 to 5 increasing in total acreage. |
| | Wild and Scenic rivers | Miles of rivers designated as wild, scenic, or recreational within a 25-mile radius | Wild and Scenic Rivers, 2017. The United States Forest Service, National Park Service, Bureau of Land Management, and the United States Fish and Wildlife are the four primary federal agencies with responsibility for the National Wild and Scenic Rivers System. These agencies are responsible for protecting and enhancing the river values for the components located within their management boundaries, whether designated by Congress, or by the Secretary of Interior at the request of a governor. Many rivers include private and tribal lands within the boundaries of the designated river area. | National Wild and Scenic Rivers System https://www.rivers.gov/mapping-gis.php | This model tabulates the total miles of Wild and Scenic Rivers designated as wild, scenic or recreational within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the wild and scenic rivers from 1 to 5 increasing in total miles |

| | Indicator | Description | Dataset | Source | Model |
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| | Wilderness and Parks | Acres of national and state parks, national monuments and wilderness areas within a 25-mile radius | USGS Protected Areas Database (PADUS), 2016<br>The USGS Protected Areas Database of the United States (PAD-US) is the nation's inventory of protected areas, including public open space and voluntarily provided, private protected areas, identified as an A-16 National Geospatial Data Asset in the Cadastral Theme (http://www.fgdc.gov/ngda-reports/NGDA_Datasets.html). PAD-US is an ongoing project with several published versions of a spatial database of areas dedicated to the preservation of biological diversity, and other natural, recreational or cultural uses, managed for these purposes through legal or other effective means. The geodatabase maps and describes public open space and other protected areas. | US Geological Survey<br>http://gapanalysis.US Geological Survey.gov/padus/data/download/ | This model extracts National Parks, National Monuments, State Parks, and Wilderness Areas from the Protected Areas Database then tabulates the total acreage within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the protected areas from 1 to 5 increasing in total acreage. |
| | Ski Areas | Has a ski resort within 25-mile radius | Ski Central Resort Listing, 2016<br>Ski resort guide and directory for ski resorts across North America | Ski Central<br>http://www.skicentral.com/ | This model counts the number of ski resorts within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the number of ski areas from 1 to 5 increasing in total count. |
| **Resources at Risk** | | Natural resouces that are threatened or damaged | | | |
| | At Risk For Development | Acres of land at risk for development by the year 2030 within 25-mile radius. | USA Development Risk by 2030, 2007, 270m<br>The development risk data layer is intended to emphasize areas that are projected to experience increased housing development in the next 30 years. It is one of seven standard input layers which support the USFS State and Private Forestry Potential Assessment Redesign Project. These layers are also provided as known data layers and made available to states for their forest resource assessments. All layers have been reclassified and co-registered to facilitate their use in future analyses. Crosswalk tables have been provided to convert tabular values to a 0 - 10 or other more appropriate classification system. The intent is to promote accuracy and understanding of the data's appropriate application either singly, or in combination with other standard layers to produce answers to specific questions. | Esri<br>http://www.arcgis.com/home/item.html?id=6d53dbb57c984e91a473a0c4b50c0714 | This model extracts all areas identified as land under development risk by the year 2030 (classes 1, 2, 3, and 4) and tabulates the total acreage within each 25 mile area.<br><br>Areas are scored using natural breaks to classify development risk from 1 to 5 increasing in total acreage. |
| | Drought | Number of declared droughts within 25-mile radius | FEMA Disaster Declarations for States and Counties, 1953-2015<br>Historic federal disaster declarations by state, county, hazard, and year. | FEMA<br>https://www.fema.gov/media-library/assets/documents/106308 | This model summarizes the number of declared droughts for the counties that intersect each 25 mile area.<br><br>Areas are scored using natural breaks to classify declared droughts from 1 to 5 increasing in total count. |
| | Flooding | Number of declared flood disasters within 25-mile radius | FEMA Disaster Declarations for States and Counties, 1953-2015<br>Historic federal disaster declarations by state, county, hazard, and year. | FEMA<br>https://www.fema.gov/media-library/assets/documents/106308 | This model summarizes the number of declared floods for the counties that intersect each 25 mile area.<br><br>Areas are scored using natural breaks to classify declared floods from 1 to 5 increasing in total count. |
| | Wildfire | Acres of high risk of wildfire within 25-mile radius | Wildfire Hazard Potential, 2014, 270m<br>Federal wildfire managers often want to know, over large landscapes, where wildfires are likely to occur and how intense they may be. To meet this need we developed a map that we call wildfire hazard potential (WHP) – a raster geospatial product that can help to inform evaluations of wildfire risk or prioritization of fuels management needs across very large spatial scales (millions of acres). Our specific objective with the WHP map was to depict the relative potential for wildfire that would be difficult for suppression resources to contain. To create the 2014 version, we built upon spatial estimates of wildfire likelihood and intensity generated in 2014 with the Large Fire Simulation system (FSim) for the national interagency Fire Program Analysis system (FPA), as well as spatial fuels and vegetation data from LANDFIRE 2010 and point locations of fire occurrence from FPA (ca. 1992 – 2012). | US Forest Service<br>http://www.fs.usda.gov/rds/archive/Product/RDS-2015-0046 | This model extracts areas with High and Very High wildfire risk classes from the USFS Wildfire Hazard Potential grid and tabulates the total acreage within each 25 mile area.<br><br>Areas are scored using natural breaks to classify wildfire hazard potential from 1 to 5 increasing in total acreage. |
| | At Risk for Human Modification | Acres of land at risk for human development within 25-mile radius | Human modification in the western US, 2011, v20160512, 270m<br>To map the degree of human modification, a list of stressors (or threats to natural lands) was organized based on The Human Activities Framework (Salafsky et al. 2008; http://cmp-openstandards.org/using-os/tools/threats-taxonomy/). At the top level, stressors are organized into five Level I classes: residential and commercial development, agriculture, energy production and mining, transportation and service corridors, and biological harvesting. These are further broken into 1-3 specific activities, resulting in 11 Level II classes. For each stressor, specific datasets were used on which to calculate a specific indicator(s). In total, nearly two-dozen datasets were used to depict 14 types of human activities. Each of these datasets was based on readily available spatial data that represented multiple time periods. | https://databasin.org/datasets/d9d70bfc6e0b46789f1113c63f373c96 | This model extracts areas with high probability for human modification (>0.5) and tabulates the total acreage within each 25 mile area.<br><br>Areas are scored using natural breaks to classify human modification from 1 to 5 increasing in total acreage. |
| | Invasive Species | Acres of invasive plant species within 25-mile radius | USFS Invasive Plants, 2017<br>The Current Invasive Plants (InvasivePlantCurrent) feature class contains only the most recent or latest invasive Plant Infestation polygons collected by the National Invasive Plant Inventory Protocol. Includes most recent and excludes historic observations. Includes Site ID, Plant code, status etc. for the infesting species, date, area and other basic data. | US Forest Service<br>http://data.fs.usda.gov/geodata/edw/edw_resources/meta/S_USA.InvasivePlantCurrent.xml | This model tabulates the total acreage of USFS Invasive Plant areas within each 25 mile area.<br><br>Areas are scored using natural breaks to classify invasive plants from 1 to 5 increasing in total acreage. |
| **Vulnerable Populations** | | Indicators of population most at need | | | |
| | Child Poverty | Percentatge of children aged 5 - 17 living in poverty | Children in Poverty, 2005-2009 and 2010-2014<br>Percent below poverty level by age and family type is calculated by dividing the number of people by demographic in poverty by the total population of that demographic. | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the average percentage of children living in deep poverty to each area.<br><br>Areas are scored using natural breaks to classify the average percent of children living in deep poverty from 1 to 5 increasing in average percentage. |
| | Housing Affordability | Percent of households where rent >30% of household income | Housing Affordability, 2010-2014<br>Refers to households where rent >30% of household income. | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the percentage of households where rent >30% of household income to each area.<br><br>Areas are scored using natural breaks to classify the percent of households where rent >30% of household income from 1 to 5 increasing in percentage. |
| | Income Distribution | High variation between income groups | Income Distribution, 2010-2014<br>The Gini Index is a summary measure of income inequality. The Gini coefficient incorporates the detailed shares data into a single statistic, which summarizes the dispersion of income across the entire income distribution. The Gini coefficient ranges from 0, indicating perfect equality (where everyone receives an equal share), to 1, perfect inequality (where only one recipient or group of recipients receives all the income). The Gini is based on the difference between the Lorenz curve (the observed cumulative income distribution) and the notion of a perfectly equal income distribution. | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the income distribution (gini coefficient) to each area.<br><br>Areas are scored using natural breaks to classify the income distribution (gini coefficient) from 1 to 5 increasing in amount. |

| | | Income Volatility | Volatility of personal income between 1970 - 2014 | Income Volatility, 2014<br>Standard deviation of change in personal income from previous year divided by the absolute value of the mean. Calculated with income data from 1970 to 2014. | U.S. Department of Commerce. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. | This model apportions the change in personal income from previous year divided by the absolute value of the mean to each area.<br><br>Areas are scored using natural breaks to classify the change in personal income from 1 to 5 increasing in amount. |
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| | | Labor participation | Percentage of working age population without a job | Labor Participation, 2010-2014<br>Refers to the percent of the population that did not work. | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the percentage of population that did not work to each area.<br><br>Areas are scored using natural breaks to classify the percent of population that did not work from 1 to 5 increasing in percentage. |
| | | Seasonal Housing | Percent of seasonal housing | Seasonal Housing, 2010-2014<br>Refers to vacant units used or intended for use only in certain seasons or for weekends or other occasional use throughout the year. | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the percentage of seasonal households to each area.<br><br>Areas are scored using natural breaks to classify the percent of seasonal households from 1 to 5 increasing in percentage. |
| | | Non-White Population | Percentage of non-white population | Non-White Population, 2010-2014<br>Population of non-white not including Hispanic | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the percentage of non-white population each area.<br><br>Areas are scored using natural breaks to classify the percent of non-white population from 1 to 5 decreasing in percentage. |
| | | Deep Poverty | Percentatge of households living more than 50% below the poverty level. | Persistent Poverty, 2005-2009 and 2010-2014<br>Percent below poverty level by age and family type is calculated by dividing the number of people by demographic in poverty by the total population of that demographic.<br><br>Average percent of households in deep poverty (i.e., living more than 50% below the poverty level) | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the average percentage of families living in deep poverty to each area.<br><br>Areas are scored using natural breaks to classify the average percent of families living in deep poverty from 1 to 5 increasing in average percentage. |
| | | Travel Time to Work | Average commute time | Travel Time to Work, 2010-2014<br>Commute time refers to workers travel from home to work and is measured in average number of minutes | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the average commute time to work in minutes to each area.<br><br>Areas are scored using natural breaks to classify the average commute time to work from 1 to 5 increasing in minutes. |
| | | Low Educational Attainment | Percentage of population with only high school degree | Educational Attainment, 2010-2014<br>The level of education completed by people 25 years and over in terms of the highest degree or the highest level of schooling completed. | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the percentage of population with greater than a high school degree to each area.<br><br>Areas are scored using natural breaks to classify the percent of population with greater than a high school degree from 1 to 5 decreasing in percentage. |
| **Water Threats** | | | Impaired or sensitive water resources | | | |
| | | Fish Habitat | Miles of critical fish habitat within 25-mile radius | FWS Critical Habitat for Threatened and Endangered Species, 2017<br>When a species is proposed for listing as endangered or threatened under the Endangered Species Act, the U.S. Fish and Wildlife Service must consider whether there are areas of habitat believed to be essential the speciesâconservation. Those areas may be proposed for designation as âcritical habitatâ. Critical habitat is a term defined and used in the Act. It is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. An area is designated ascritical habitatâ after the Service publishes a proposed Federal regulation in the Federal Register and receives and considers public comments on the proposal. The final boundaries of the critical habitat are also published in the Federal Register. | US Fish and Wildlife Service<br>http://catalog.data.gov/dataset/fws-critical-habitat-for-threatened-and-endangered-species-dataset362c4 | This model tabulates the total miles of critical fish habitat within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the critical fish habitat from 1 to 5 increasing in total miles. |
| | | Drinking Water | Acres within 25-mile radius ranked as high importance for drinking water supply | USFS Forest to Faucets, 2011<br>The USDA Forest Service Forests to Faucets project uses GIS to model and map the continental United States land areas most important to surface drinking water, the role forests play in protecting these areas, and the extent to which these forests are threatened by development, insects and disease, and wildland fire.<br><br>The results of this assessment provide information that can identify areas of interest for protecting surface drinking water quality. The spatial dataset can be incorporated into broad-scale planning, such as the State Forest Action Plans, and can help identify areas for further local analysis. In addition it can be incorporated into existing decision support tools that currently lack spatial data on important areas for surface drinking water. | US Forest Service<br>http://www.fs.fed.us/ecosystemservices/FS_Efforts/forests2faucets.shtml<br><br>NRCS Hydrologic Units Code 12<br>https://gdg.sc.egov.usda.gov/ | This model extracts the HUC 12 watersheds that have an importance to surface drinking water index greater than 50 from the USFS Forest 2 Faucets layer and tabulates the total acreage within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the surface drinking water importance from 1 to 5 increasing in total acreage. |
| | | Impaired Streams | Miles of impaired streams within 25-mile radius | EPA 303(d) Listed Impaired Waters, 2015<br>Under Section 303(d) of the CWA, states, territories, and authorized tribes (referred to here as states) are required to develop lists of impaired waters. These are waters that are too polluted or otherwise degraded to meet the state water quality standards. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop TMDLs for these waters. | US Environmental Protection Agency<br>https://www.epa.gov/waterdata/waters-geospatial-data-downloads | This model tabulates the total miles of EPA 303d Impaired Streams within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the impaired streams from 1 to 5 increasing in total miles. |

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| | Riverine Corridor | Acres of riverine habitat within areas threatened by development within 25-mile radius | USFWS National Wetlands Inventory, 2017<br>This data set represents the extent, approximate location and type of wetlands and deepwater habitats in the United States and its Territories. These data delineate the areal extent of wetlands and surface waters as defined by Cowardin et al. (1979). The National Wetlands Inventory - Version 2, Surface Waters and Wetlands Inventory was derived by retaining the wetland and deepwater polygons that compose the NWI digital wetlands spatial data layer and reintroducing any linear wetland or surface water features that were orphaned from the original NWI hard copy maps by converting them to narrow polygonal features.<br><br>USA Development Risk by 2030, 2007, 270m<br>The development risk data layer is intended to emphasize areas that are projected to experience increased housing development in the next 30 years. It is one of seven standard input layers which support the USFS State and Private Forestry Potential Assessment Redesign Project. These layers are also provided as known data layers and made available to states for their forest resource assessments. All layers have been reclassified and co-registered to facilitate their use in future analyses. Crosswalk tables have been provided to convert tabular values to a 0 - 10 or other more appropriate classification system. The intent is to promote accuracy and understanding of the data's appropriate application either singly, or in combination with other standard layers to produce answers to specific questions. | US Fish and Wildlife Service<br>http://www.fws.gov/wetlands/Data/State-Downloads.html<br><br>Esri<br>http://www.arcgis.com/home/item.html?id=6d53dbb57c984e91a473a0c4b50c0714 | This model intersects the USFWS National Wetlands with the US Development Risk areas and tabulates the total acreage within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the riverine corridor threats from 1 to 5 increasing in total acreage. |
| | Fire Risk to Water | Acres of high importance watershed within 25-mile radius at risk from wildfire | USFS Forest to Faucets, 2011<br>The USDA Forest Service Forests to Faucets project uses GIS to model and map the continental United States land areas most important to surface drinking water, the role forests play in protecting these areas, and the extent to which these forests are threatened by development, insects and disease, and wildland fire.<br><br>The results of this assessment provide information that can identify areas of interest for protecting surface drinking water quality. The spatial dataset can be incorporated into broad-scale planning, such as the State Forest Action Plans, and can help identify areas for further local analysis. In addition it can be incorporated into existing decision support tools that currently lack spatial data on important areas for surface drinking water. | US Forest Service<br>http://www.fs.fed.us/ecosystemservices/FS_Efforts/forests2faucets.shtml<br><br>NRCS Hydrologic Units Code 12<br>https://gdg.sc.egov.usda.gov/ | This model extracts the HUC 12 watersheds with forest fire risk greater than 50% USFS Forest 2 Faucets layer and tabulates the total acreage within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the areas at risk from forest fire from 1 to 5 increasing in total acreage. |
| | Wetlands | Acres of wetlands within 25-mile radius | USFWS National Wetlands Inventory, 2017<br>This data set represents the extent, approximate location and type of wetlands and deepwater habitats in the United States and its Territories. These data delineate the areal extent of wetlands and surface waters as defined by Cowardin et al. (1979). The National Wetlands Inventory - Version 2, Surface Waters and Wetlands Inventory was derived by retaining the wetland and deepwater polygons that compose the NWI digital wetlands spatial data layer and reintroducing any linear wetland or surface water features that were orphaned from the original NWI hard copy maps by converting them to narrow polygonal features. | US Fish and Wildlife Service<br>http://www.fws.gov/wetlands/Data/State-Downloads.html | This model tabulates the total acreage of USFWS National Wetlands within each 25 mile area.<br><br>Areas are scored using natural breaks to classify the wetland areas from 1 to 5 increasing in total acreage. |
| **Community Capacity** | | | | | |
| | Contributed to Conservation\Environment | Percentage of populaton that contributed to conservation\ environmental org in last year | The Esri Market Potential database includes data for 5,000 items organized into 21 categories, representing goods, services, attitudes, and activities, collected by Mediamark Research Inc. (MRI) Doublebase 2014 database. Market potential data measures the likely demand for a product or service. | Esri Business Analyst 2016 | This model apportions the percentage of populaton that contributed to conservation\ environmental org in last year to each area.<br><br>Areas are scored using natural breaks to classify the percent populaton that contributed to conservation\ environmental org in last year from 1 to 5 increasing in percentage. |
| | Civic Participation | Percentage of populaton that attended public meeting on town or school affairs in last year | The Esri Market Potential database includes data for 5,000 items organized into 21 categories, representing goods, services, attitudes, and activities, collected by Mediamark Research Inc. (MRI) Doublebase 2014 database. Market potential data measures the likely demand for a product or service. | Esri Business Analyst 2016 | This model apportions the percentage of populaton that attended public meeting on town or school affairs in last year to each area.<br><br>Areas are scored using natural breaks to classify the percent populaton that attended public meeting on town or school affairs in last year from 1 to 5 increasing in percentage. |
| | Public Participation | Percentage of populaton that participated in any public activity in last year | The Esri Market Potential database includes data for 5,000 items organized into 21 categories, representing goods, services, attitudes, and activities, collected by Mediamark Research Inc. (MRI) Doublebase 2014 database. Market potential data measures the likely demand for a product or service. | Esri Business Analyst 2016 | This model apportions the percentage of populaton that participated in any public activity in last year to each area.<br><br>Areas are scored using natural breaks to classify the percent populaton that participated in any public activity in last year from 1 to 5 increasing in percentage. |
| | Community Service | Percentage of populaton that served on committee for local organization in last year | The Esri Market Potential database includes data for 5,000 items organized into 21 categories, representing goods, services, attitudes, and activities, collected by Mediamark Research Inc. (MRI) Doublebase 2014 database. Market potential data measures the likely demand for a product or service. | Esri Business Analyst 2016 | This model apportions the percentage of populaton that served on committee for local organization in last year to each area.<br><br>Areas are scored using natural breaks to classify the percent populaton that served on committee for local organization in last year from 1 to 5 increasing in percentage. |
| | Volunteering | Percentage of populaton that volunteered for a charitable org in last year | The Esri Market Potential database includes data for 5,000 items organized into 21 categories, representing goods, services, attitudes, and activities, collected by Mediamark Research Inc. (MRI) Doublebase 2014 database. Market potential data measures the likely demand for a product or service. | Esri Business Analyst 2016 | This model apportions the percentage of populaton that volunteered for a charitable org in last year to each area.<br><br>Areas are scored using natural breaks to classify the percent populaton that volunteered for a charitable org in last year from 1 to 5 increasing in percentage. |
| | Voting | Percentage of populaton that voted in federal/state/local election in last year | The Esri Market Potential database includes data for 5,000 items organized into 21 categories, representing goods, services, attitudes, and activities, collected by Mediamark Research Inc. (MRI) Doublebase 2014 database. Market potential data measures the likely demand for a product or service. | Esri Business Analyst 2016 | This model apportions the percentage of populaton that voted in federal/state/local election in last year to each area.<br><br>Areas are scored using natural breaks to classify the percent populaton that voted in federal/state/local election in last year from 1 to 5 increasing in percentage. |
| **Geographic and Rural Characteristic** | | | | | |
| | Population | | | US Census Bureau<br>https://www.census.gov/geo/maps-data/data/tiger.html | |
| | State | | | US Census Bureau<br>https://www.census.gov/geo/maps-data/data/tiger.html | |

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| | Metropolitan Area | | Metropolitan Statistical Area, 2015<br>An MSA consists of one or more counties that contain a city of 50,000 or. more inhabitants, or contain a Census Bureau-defined urbanized area (UA) and have a total population of at least 100,000 (75,000 in New England). | US Census Bureau<br>https://www.census.gov/geo/maps-data/data/tiger.html | |
| **Population Change** | | | | | |
| | Population Change | | Population Change, 1970-2014 | U.S. Department of Commerce. 2015. Census Bureau, American Community Survey Office, Washington, D.C. | This model apportions the percentage of population change from 1970-2014 to each area. |
| **Economic Transition** | | | | | |
| | Jobs in Farming | | Jobs in Farming, 1970-2014<br>The number of workers (full and part-time) engaged in the production of agricultural commodities, either livestock or crops. It includes sole proprietors, partners, and hired laborers. | U.S. Department of Commerce. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. | This model apportions the average percentage of jobs in farming from 1970 to 2014 to each area.<br><br>Areas are scored using natural breaks to classify the average percent of jobs in farming from 1970 to 2014 from 1 to 5 increasing in average percentage. |
| | Jobs in Forestry | | Jobs in Forestry, 1970-2014<br>The number of jobs (full and part-time) and the share of total jobs in the timber industry, broken out by three major categories: growing and harvesting, sawmills and paper mills, and wood products manufacturing. | U.S. Department of Commerce. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. | This model apportions the average percentage of jobs in forestry from 1970 to 2014 to each area.<br><br>Areas are scored using natural breaks to classify the average percent of jobs in forestry  from 1970 to 2014 from 1 to 5 increasing in average percentage. |
| | Jobs in Mining | | Jobs in Mining, 1970-2014<br>The number of jobs (full and part-time) and the share of total jobs in the mining industry, broken out into four major sub-sectors: oil and gas extraction, coal mining, metal ore mining, and nonmetallic minerals mining. | U.S. Department of Commerce. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. | This model apportions the average percentage of jobs in mining from 1970 to 2014 to each area.<br><br>Areas are scored using natural breaks to classify the average percent of jobs in mining from 1970 to 2014 from 1 to 5 increasing in average percentage. |