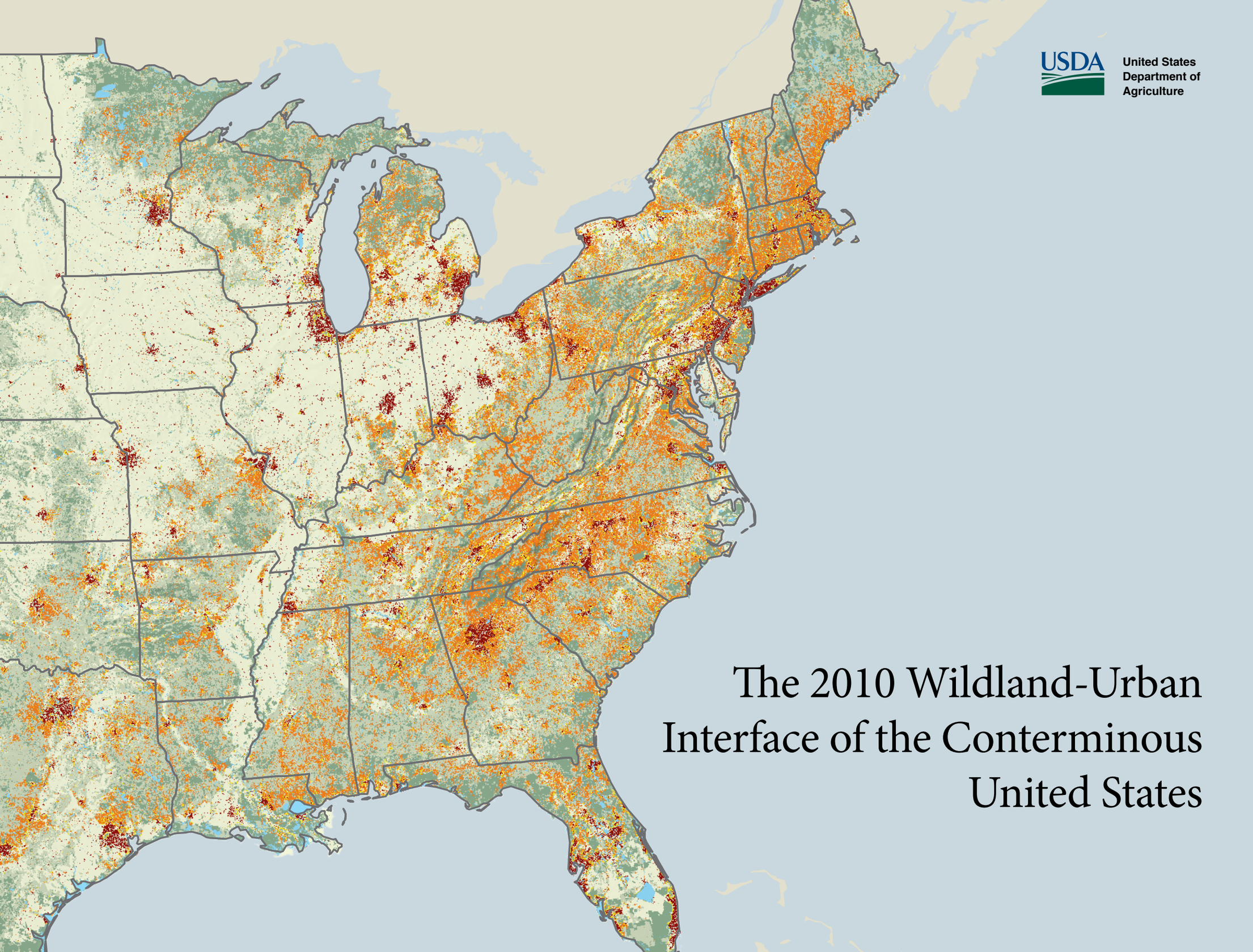


USDA United States Department of Agriculture

The 2010 Wildland-Urban Interface of the Conterminous United States

Abstract

The wildland-urban interface (WUI) is the area where structures and other human development meet or intermingle with undeveloped wildland, and it is where wildfires have their greatest impacts on people. Hence the WUI is important for wildfire management. This document and associated maps summarize the extent of the WUI in the conterminous United States in 2010. The maps and summary statistics are designed to inform both national policy and local land management concerning the WUI. The data presented here summarize the 2010 WUI at a national scale and for each of the 48 conterminous States. All products of this assessment—including maps, statistics, and the WUI GIS dataset—can be accessed at http://www.nrs.fs.fed.us/data/WUI.

Acknowledgments

We acknowledge the support of the National Fire Plan research program. We thank David Godwin of the University of Florida, Russ Langford of the U.S. Fish and Wildlife Service, and Kari Greer of Kari Greer Photography, for the photos in this publication, and K. Johnson, J. Kreitler, and K. Riitters for helpful comments, which greatly strengthened this report. Map creation was completed at the UW-Madison Cartography Laboratory by cartographers Jonathan Koser, Peter Bauknecht, Chloë Quinn, Katelyn Kowalsky, and Tanya M.A. Buckingham.

The 2010 Wildland-Urban Interface of the Conterminous United States

Sebastián Martinuzzi, Susan I. Stewart, David P. Helmers, Miranda H. Mockrin, Roger B. Hammer, and Volker C. Radeloff

Sebastián Martinuzzi, David P. Helmers, and Volker C. Radeloff, University of Wisconsin-Madison, Department of Forest and Wildlife Ecology, SILVIS Lab, 1630 Linden Drive, Madison, WI 53706

Susan I. Stewart, University of Wisconsin-Madison, Department of Forest and Wildlife Ecology, SILVIS Lab, 1630 Linden Drive, Madison, WI 53706, and formerly with U.S. Forest Service, Northern Research Station in Evanston, IL.

Miranda H. Mockrin, U.S. Forest Service, Rocky Mountain Research Station, 5523 Research Park Dr., Suite 350, Baltimore, MD 21228

Roger B. Hammer, Oregon State University, School of Public Policy, Corvallis, OR 97331

Sebastián Martinuzzi is corresponding author; contact him at martinuzzi@wisc.edu
phone: +1/608 890 3160
fax: +1/608 262 9922

About this publication

This report provides a spatially detailed assessment of the wildland-urban interface (WUI) across the conterminous United States for 2010, to inform both national policy and local land management concerning the WUI and associated issues. All maps, graphics, and statistics are available for public use as is the associated data (Martinuzzi et al. 2015), which can be used within a geographical information system (GIS) for WUI mapping and analysis at national, State, and local levels. The WUI GIS datasets can be accessed at http://dx.doi.org/10.2737/RDS-2015-0012.

Products associated with this publication

- National WUI map (a folded map in the pocket at the back of this report)
- WUI maps for 48 States
- WUI statistical summary tables by State
- Ancillary State maps (land cover, housing density, land ownership, wildland vegetation cover)

Associated products accessible from www.nrs.fs.fed/us/data/WUI include GIS files used to compose these maps. The programming code to generate the WUI maps (Python script) is available upon request.

Table of Contents

Waldo Canyon Fire, Colorado Springs, CO, July 2012. This post-fire photograph of the wildland-urban interface shows fire scars in brown and grey, and houses destroyed and untouched by the fire. Photo by Kari Greer, used with permission.

Introduction

The population of the United States is becoming less concentrated in urban centers as more people move out to suburbs, exurbs, and rural areas (Alig et al. 2010, Brown et al. 2005). This trend toward decentralized urbanization has resulted in rapid development in the outlying fringe of metropolitan areas, and into rural areas with attractive recreational and aesthetic amenities, especially forests (Johnson et al. 2005). In recent decades, this trend has resulted in a steady increase in the area that is part of the wildland-urban interface (WUI), defined as the area where structures and other human development meet or intermingle with undeveloped wildland (Radeloff et al. 2005b).

WUI expansion has many implications for wildfire management. The WUI creates an environment in which fire can move readily from forests and grasslands into neighborhoods. Consequently, WUI expansion has increased the likelihood that wildfires will threaten structures and people, and has increased the number of people and homes affected by wildfire (Bar Massada et al. 2009). Home owners in the WUI and fire managers charged with protecting homes in the WUI may have different perspectives, though, on even simple issues such as landscaping the yard: lush vegetation provides privacy and scenic beauty to the homeowner, but allows fire to more easily spread to and threaten the house. Beyond wildfire, the WUI is an area where people and their homes affect the natural environment, contributing to loss of habitat for native species, forest fragmentation, and introduction of exotic species, all trends that will threaten biodiversity if WUI residents and communities are not attentive to the potential harms and active in caring for their environment (Bar Massada et al. 2014, Radeloff et al. 2005a, Syphard et al. 2009).

As a result of these environmental and natural resource management concerns, mapping the WUI is important for environmental policy. WUI trends are difficult to predict. Housing growth can increase or decrease the WUI. New houses in and near forests and other wildlands create new WUI areas, except when too much wildland vegetation is removed or replaced with lawns, gardens, and roads, in which case new or existing neighborhoods are not part of the WUI. We update the WUI map each decade to take into account changes to the WUI and changes within the WUI. While this publication focuses on the 2010 WUI assessment, previous WUI maps (1990, 2000) are available at http://silvis.forest.wisc.edu. We caution that the maps presented here are not directly comparable with those from earlier decades due to changes in census block boundaries. However, summary statistics are comparable, and comparable maps for 1990, 2000, and 2010 will be available by 2015 on the SILVIS website.

The expansion of the wildland-urban interface continues to increase the likelihood that wildfires will threaten structures and people.

Wildland-urban interface neighborhood near Sherburne National Wildlife Refuge, Minnesota. The column of smoke is the result of prescribed fires associated with hazardous fuel reduction and habitat restoration practices, April, 2012. Photo by Russ Langford, U.S. Fish and Wildlife Service.

Waldo Canyon Fire, Colorado Springs, CO, July, 2012. Aerial photograph of the wildland-urban interface. Note the fire scars (brown/gray color) reaching the limits of the neighborhood, and the roads and water storage tank potentially threatened by wildfire. Photo by Kari Greer, used with permission.

The Wildland-Urban Interface Defined

Although the idea of a wildland-urban interface is easily understood and the term widely used, a specific definition is needed to determine where it occurs and map its location. The definition we use here, as in earlier map projects, is designed to inform fire policy and management. It is based on a report prepared for the Council of Western State Foresters on WUI fire risk (Teie and Weatherford 2000) and was later published in the Federal Register. [1]

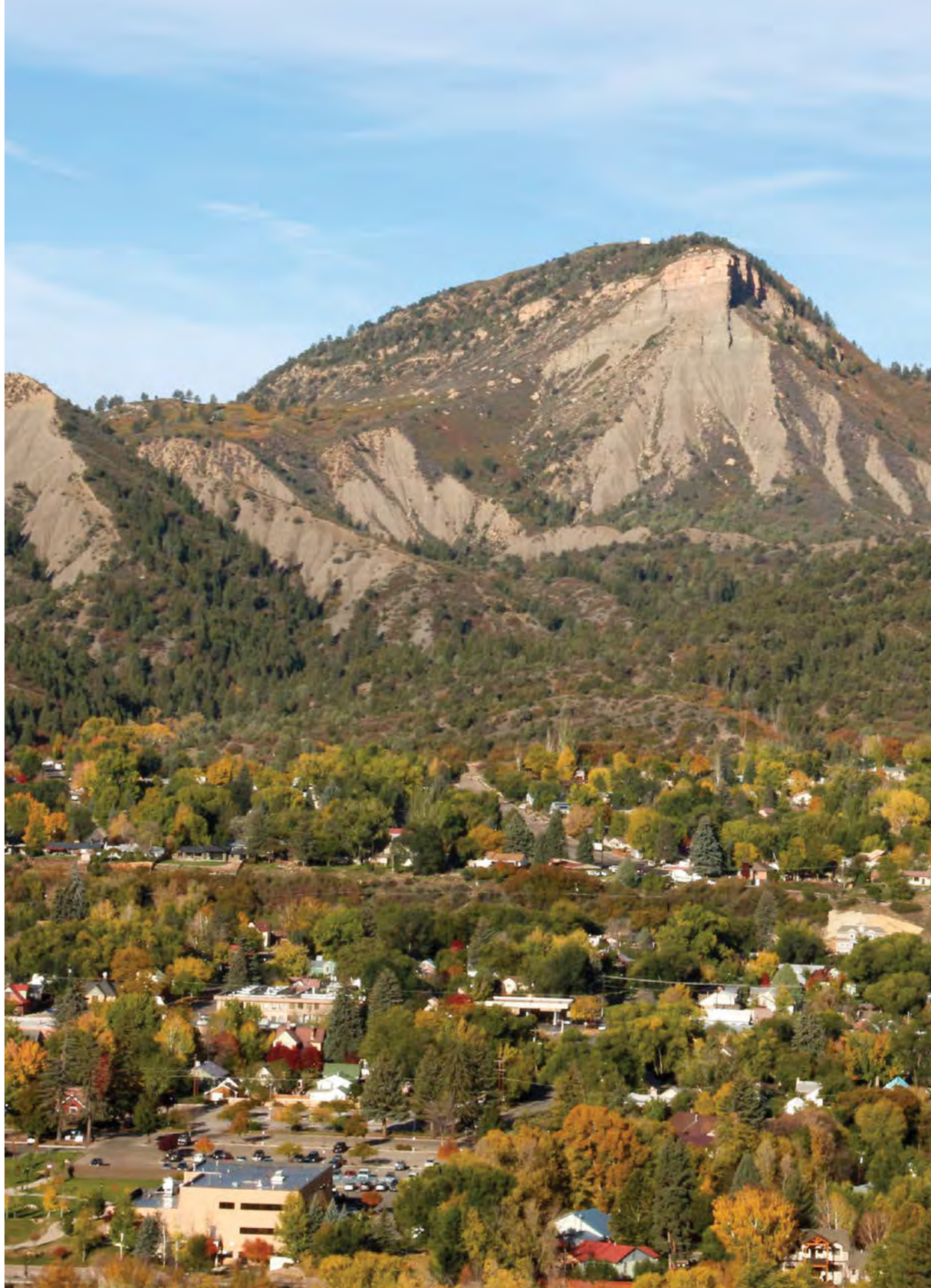
The WUI is composed of both *interface* and *intermix* communities. The distinction between these is based on the characteristics and distribution of houses and wildland vegetation across the landscape. Intermix WUI refers to areas where housing and wildland vegetation intermingle, while interface WUI refers to areas where housing is in the vicinity of a large area of dense wildland vegetation. For more detail, see Box 1.

Box 1.—Definition of WUI and non-WUI land-use classes.

WUI Definition	
Intermix	Areas with ≥6.18 houses per km^2 and ≥50 percent cover of wildland vegetation
Interface	Areas with ≥6.18 houses per km^2 and <50 percent cover of vegetation located <2.4 km of an area ≥5 km^2 in size that is ≥75 percent vegetated
Non-WUI, Vegetated	
No housing	Areas with ≥50 percent cover of wildland vegetation and no houses (e.g., protected areas, steep slopes, mountain tops)
Very low housing density	Areas with ≥50 percent cover of wildland vegetation and <6.18 houses per km^2 (e.g., dispersed rural housing outside neighborhoods)
Non-Vegetated or Agriculture	
Low and very low housing density	Areas with <50 percent cover of wildland vegetation and <49.42 houses per km^2 (e.g., agricultural lands and pasturelands)
Medium and high housing density	Areas with <50 percent cover of wildland vegetation and ≥49.42 houses per km^2 (e.g., urban and suburban areas, which may have vegetation, but not dense vegetation)

1 "Urban wildland interface communities within the vicinity of federal lands that are at high risk from wildfire. Notice." 66. Federal Register 3(2001 January 4): 751-777.

Durango, Colorado.
Thinkstock.com.



In both interface and intermix WUI, housing must meet or exceed a minimum density of 6.18 houses per km^2 (one structure per 40 acres) and meet particular vegetation conditions. Intermix WUI must have more than 6.18 houses per km^2 and more than 50 percent of its area covered in wildland vegetation. Interface WUI must have more than 6.18 houses per km^2 and *less* than 50 percent vegetation cover, but be within 2.4 km of an area over 5 km^2 that is more than 75 percent vegetated (Fig. 1). By requiring areas of adjacent wildland vegetation to meet the minimum size limit (>5 km^2), we ensure that neighborhoods surrounding small urban parks are not classified as interface WUI (Stewart et al. 2007). The buffer distance for the interface WUI (2.4 km) identifies residential areas in the vicinity of wildlands; it is the approximate distance that firebrands can be carried from a wildland fire (California Fire Alliance 2001). This buffer takes into account that homes that are near but not embedded within the forest are at risk of being burned in a wildland fire. With minimum housing densities, vegetation types, and interface buffer distances determined, the operational definition of the WUI is complete. Areas that do not meet the WUI requirements are not included in the WUI categories and represent the non-WUI land-use classes (Box 1).

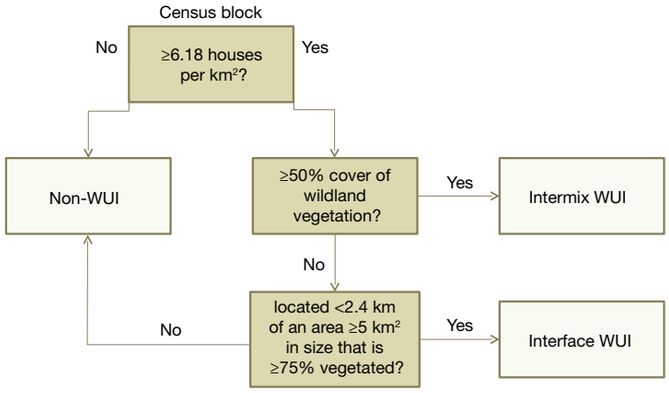


Figure 1.—Flowchart describing the definition of the intermix and interface WUI.

Mapping the 2010 WUI

Mapping the WUI requires spatially explicit data on housing density and wildland vegetation cover and a GIS environment to process and integrate these data sets. WUI maps in this report depict 2010 WUI using the most recent national information on housing density and wildland vegetation cover for the conterminous United States.

Information sources

Housing: We derived housing density information from the 2010 U.S. Census (U.S. Census Bureau 2013), and conducted our analyses at the finest demographic spatial scale available, the census block. There are 11 million census blocks in the conterminous United States and for each, the decennial census reports the number of housing units. A census block can include both private and public lands, such as local parks, national forests, or other public lands. In all census blocks where public lands were present, we divided the block by land ownership, creating a sub-block of privately owned lands (i.e., with land owned by individuals, corporations, or other nongovernmental entities), and a sub-block of publically owned lands (i.e., with lands owned by the local, State, or Federal government). Where both were present, we assigned the housing counts reported for these divided census blocks only to the privately owned sub-block. Ownership data were derived from the Conservation Biology Institute's protected areas database of the United States (PAD-US), version 1.1 (Conservation Biology Institute 2010).

Wildland vegetation: Wildland vegetation cover was derived from the 2006 National Land Cover Dataset (NLCD 2006) (Fry et al. 2011), a satellite data classification produced by the U.S. Geological Survey with 30-meter resolution, representing the status of land cover in 2006 and available for the conterminous United States (http://www.mrlc.gov/nlcd2006.php). In our definition, "wildlands" are the vegetation cover types for which human manipulation is minimal. The NLCD 2006 classes that we included as "wildlands" are forests (coniferous, deciduous, and mixed), grasslands, shrubs, and wetlands. We exclude orchards, arable lands (e.g., row crops, agriculture), and pasture.

Data processing

Mapping the WUI requires several processing steps using a geographic information system (GIS), specialized computer software designed for spatial analysis. The GIS procedures and specifications are described in detail in Box 2.

Box 2.—GIS process for generating the 2010 WUI.

Hardware: 32-core server with 128 GB RAM. Software: ArcGIS 10.1 automated entirely using Python scripting (>800 lines of code, Python 2.7). This script is available upon request.

1. Preprocess housing data (creates 15 GB of data)
    1. Download housing data and block geography shapefiles from Census Bureau website (>11 million blocks).
    2. Match (join) census housing counts to blocks to create State housing GIS datasets
    3. Download shapefile with public lands boundaries from the Conservation Biology Institute
    4. Adjust for public land boundaries, subdividing blocks and moving houses out of publicly-owned lands (>11.2 million blocks). Public and private ownership boundaries are intersected with block boundaries, and sub-blocks coded as public or private.
    5. Calculate housing density for each privately-owned sub-block

2. Preprocess land cover data
    1. Download NLCD 2006 data for the US from http://www.mrlc.gov/nlcd2006.php
    2. Reclassify NLCD land cover classes into wildland-vegetation and non-vegetation categories

3. Process WUI (increases dataset to 16.6 GB)
    1. Add land cover data to housing data: for each private sub-block, tabulate the relative percentage of wildland vegetation
    2. *Intermix classification:* for each private sub-block, assign an intermix WUI class based on vegetation and housing density
    3. *Interface classification*
        1. Select blocks with >75 percent vegetation, dissolve into contiguous regions of dense vegetation
        2. Remove any small regions (<500 ha) of dense vegetation
        3. Buffer out 2.4 km from each large vegetation region
        4. Union the buffered dense vegetation with the Intermix WUI classification
        5. Assign each block an Interface WUI class based on housing density and location inside a dense vegetation buffer

        Process dense vegetation that extends beyond State borders

        6. Combine “border” buffers into a single U.S. file
        7. Intersect each State WUI shapefile with U.S. border file
        8. Classify Interface WUI for State border areas based on housing density and whether it is inside a dense vegetation buffer

Wallow Fire, Arizona, 2011. Smoke from wildland fire hangs over this wildland-urban interface neighborhood.
Photo by Kari Greer, used with permission.

Results and Discussion

The spatial patterns of the WUI are illustrated in data and maps expressing four WUI characteristics that have proven useful in policy and research and are of interest to the general public and popular media. These are:

- Extent and location of WUI area
- Number of WUI housing units
- Concentration of seasonal housing units
- Number of people living in the WUI

For each characteristic, we discuss both absolute numbers and their proportion to each State's size, population, and housing stock.

WUI Area

The 2010 WUI of the conterminous United States covers a substantial amount of land—about 771,000 km^2, or 9.9 percent of the area. Within the WUI, the intermix covers a greater area than the interface, though the interface contains more houses and population (Table 1). States with the largest WUI area (km^2) are North Carolina, Texas, Georgia, and Pennsylvania, all in the eastern and southern United States and each encompassing 40,000 to 54,000 km^2 of WUI (Fig. 2). States with the smallest WUI area (less than 5,000 km^2) include those in the inland west (e.g., Wyoming, Utah) and the midwest (Nebraska, Iowa), as well as small States on the East Coast (e.g., Washington, D.C., Delaware, and Rhode Island). In general, eastern States are densely settled without large swaths of public land that are prevalent in the West and that limit housing development there. As a result, eastern States also tend to have a higher proportion of their land categorized as WUI (typically 20 to 40 percent) compared to the western states (typically less than 5 percent of land area) (Fig. 2, Table 2).

Table 1.—Summary results for the 2010 WUI. Some percentage values may not total exactly due to rounding.

	Geographic extent		Houses		Population	
	km^2	%	Total	% of U.S.	Total	% of U.S.
Conterminous U.S.	7,827,696	100.0	130,878,255	100.0	306,675,006	100.0
WUI	771,066	9.9	43,832,007	33.5	98,714,846	32.2
Interface WUI	157,619	2.0	25,911,583	19.8	59,422,925	19.4
Intermix WUI	613,447	7.8	17,920,424	13.7	39,291,921	12.8

Although the WUI term originates in wildland fire management, the WUI is also a useful indicator of human influence on natural ecosystems (Bar Massada et al. 2014). WUI area measures the extent of land with natural vegetation (forests, grasslands, shrub lands, and wetlands) where housing is dense enough and close enough to wildlands to have many ecological impacts. Ecosystems in the WUI not only have a higher likelihood of fire (Syphard et al. 2009), but also have more introduced invasive plants (Gavier-Pizarro et al. 2010), more pets that disturb or prey on birds and other wild animals (Lepczyk et al. 2004), and worse water quality due to runoff from pavement and lawns (Brabec et al. 2002). Hence, tracking WUI area can indicate changes over time in the extent and locus of human impacts on natural resources.

Growth in WUI area reflects the continued decentralization of housing development in the United States (Brown et al. 2005, Johnson et al. 2005). Preference and necessity both play a role in this decentralization. Preference for rural lifestyles and natural amenities such as forests, mountains, and lakes brings retirees and lifestyle migrants to scenic areas to build homes close to nature. High metropolitan housing costs push home buyers into new WUI areas on the exurban fringes of major cities where land is less expensive. Whether driven by preference or affordability, dispersed housing is the result of a number of economic and social factors, including portable jobs, telecommuting, tax and lending policies that encourage home ownership, and the extensive infrastructure (e.g., high quality road network) that make WUI area development practical (Hammer et al. 2009). Unfortunately, the social and

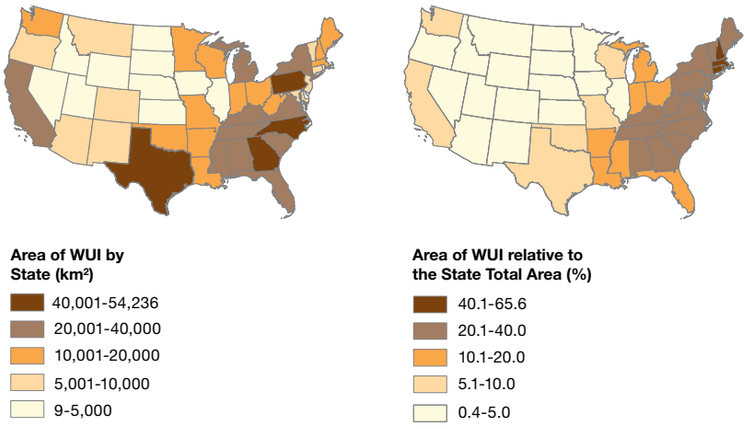


Figure 2.—Area of WUI by State.

Table 2.—Area of WUI by State and by Forest Service Region. A map with the Forest Service Regions used in this study can be found on page 23.

Region/State	Total area	Area of WUI		Area Interface		Area Intermix	
	km²	km²	%	km²	%	km²	%
Northern Region							
ID	216,442	4,403	2.0	1,393	0.6	3,010	1.4
MT	380,831	5,270	1.4	1,526	0.4	3,743	1.0
ND	183,108	688	0.4	225	0.1	463	0.3
Total	**780,381**	**10,361**	**1.3**	**3,145**	**0.4**	**7,216**	**0.9**
Rocky Mountain Region							
CO	269,602	9,451	3.5	2,219	0.8	7,232	2.7
KS	213,100	2,548	1.2	698	0.3	1,850	0.9
NE	200,329	1,229	0.6	382	0.2	848	0.4
SD	199,729	1,405	0.7	328	0.2	1,077	0.5
WY	253,334	2,415	1.0	766	0.3	1,649	0.7
Total	**1,136,094**	**17,049**	**1.5**	**4,393**	**0.4**	**12,656**	**1.1**
Southwestern Region							
AZ	295,234	8,924	3.0	2,139	0.7	6,785	2.3
NM	314,918	6,886	2.2	1,373	0.4	5,513	1.8
Total	**610,152**	**15,810**	**2.6**	**3,513**	**0.6**	**12,298**	**2.0**
Intermountain Region							
NV	286,380	2,442	0.9	1,068	0.4	1,374	0.5
UT	219,884	3,524	1.6	1,706	0.8	1,818	0.8
Total	**506,265**	**5,967**	**1.2**	**2,774**	**0.5**	**3,193**	**0.6**
Pacific Southwest Region							
CA	410,821	27,255	6.6	7,918	1.9	19,337	4.7
Pacific Northwest Region							
OR	251,375	9,549	3.8	2,728	1.1	6,821	2.7
WA	176,563	15,337	8.7	3,867	2.2	11,470	6.5
Total	**427,937**	**24,885**	**5.8**	**6,594**	**1.5**	**18,291**	**4.3**
Southern Region							
AL	133,911	30,830	23.0	6,077	4.5	24,753	18.5
AR	137,732	16,491	12.0	3,791	2.8	12,700	9.2
FL	153,125	26,036	17.0	7,268	4.7	18,768	12.3
GA	152,678	42,074	27.6	7,216	4.7	34,858	22.8
KY	104,656	25,130	24.0	4,989	4.8	20,141	19.2
LA	125,313	16,472	13.1	3,722	3.0	12,750	10.2
MS	123,523	24,347	19.7	3,810	3.1	20,536	16.6
NC	136,415	54,236	39.8	7,920	5.8	46,315	34.0
OK	181,037	13,801	7.6	3,177	1.8	10,624	5.9
SC	80,611	28,012	34.7	4,728	5.9	23,284	28.9
TN	109,153	31,021	28.4	6,958	6.4	24,062	22.0
TX	691,153	47,034	6.8	9,936	1.4	37,098	5.4
VA	105,623	35,741	33.8	6,417	6.1	29,323	27.8
Total	**2,234,932**	**391,225**	**17.5**	**76,012**	**3.4**	**315,213**	**14.1**
Eastern Region							
CT	12,985	8,523	65.6	1,438	11.1	7,085	54.6
DC	177	9	5.1	0	0.0	9	5.1
DE	5,283	968	18.3	237	4.5	731	13.8
IA	145,746	1,797	1.2	402	0.3	1,395	1.0
IL	145,918	4,300	2.9	1,195	0.8	3,106	2.1
IN	93,724	10,460	11.2	2,569	2.7	7,891	8.4
MA	21,460	11,484	53.5	2,229	10.4	9,255	43.1
MD	27,133	8,194	30.2	2,230	8.2	5,964	22.0
ME	85,876	17,818	20.7	1,353	1.6	16,464	19.2
MI	151,628	28,931	19.1	5,502	3.6	23,429	15.5
MN	218,567	10,169	4.7	1,239	0.6	8,931	4.1
MO	180,540	15,462	8.6	2,748	1.5	12,714	7.0
NH	24,036	10,092	42.0	991	4.1	9,101	37.9
NJ	20,184	7,048	34.9	2,125	10.5	4,923	24.4
NY	127,208	39,472	31.0	8,058	6.3	31,414	24.7
OH	107,056	19,960	18.6	4,088	3.8	15,872	14.8
PA	117,342	41,685	35.5	10,445	8.9	31,240	26.6
RI	3,149	1,606	51.0	243	7.7	1,363	43.3
VT	24,906	8,621	34.6	1,126	4.5	7,495	30.1
WI	145,440	14,356	9.9	2,734	1.9	11,622	8.0
WV	62,755	17,558	28.0	2,319	3.7	15,239	24.3
Total	**1,721,114**	**278,514**	**16.2**	**53,271**	**3.1**	**225,243**	**13.1**
Grand Total	**7,827,696**	**771,066**	**9.9**	**157,619**	**2.0**	**613,447**	**7.8**

Overlooking Shelburne, Vermont. Thinkstock.com

economic consequences of this type of growth can be substantial. Municipal services such as road maintenance, utilities, and social services are more costly to provide to a widely dispersed WUI population (Kramer 2013). An influx of new residents also increases the time and effort required to reach consensus on land use and land management (Hull and Stewart 2002). Even when new and old residents have the same understanding and beliefs regarding resource management, differences in familiarity with the local area are likely to slow deliberations about resource management (Stewart et al. 2012).

Housing Units in the WUI

Houses are the focal point of human activity in the WUI, and many public outreach programs that rely on cooperation from private land owners (e.g., for wildfire mitigation, backyard wildlife habitat, etc.) target individual households to influence how they manage their houses and yards. Therefore, knowing the number and growth of housing units in the WUI is important for resource managers.

As of 2010, the WUI of the conterminous United States includes about 44 million houses, equivalent to one in every three houses in the country (Table 1). Housing growth has outstripped population growth over the past 70 years because of social changes, such as smaller households (more people living alone, more divorced or single-parent households, fewer multi-generation households) and increasing numbers of seasonal homes (Hammer et al. 2009). The States with the greatest number of houses in the WUI are California (4.46 million) and Texas (3.22 million), followed by Florida, North Carolina, and Pennsylvania with 2.0 to 2.6 million houses in the WUI (Fig. 3, Table 3). States with the fewest houses in the WUI are typically sparsely populated. When we consider the number of WUI houses as a percentage of all houses in a State, many of those same States with few WUI houses have a high percentage of their housing in the WUI. Examples include Montana, Wyoming, and Maine, States where housing is sparse, but where present, is likely to occur near or within wildlands.

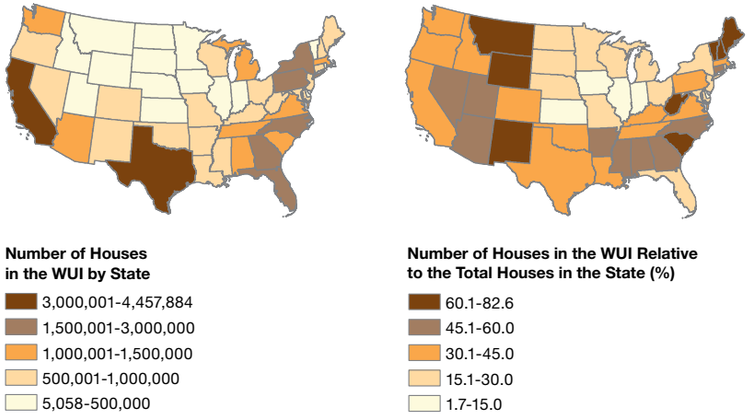


Figure 3.—Houses in the WUI by State.

Table 3.—Houses in the WUI by State and by Forest Service Region. A map with the Forest Service Regions used in this study can be found on page 23.

Region/ State	All houses	Houses in the WUI		In the Interface		In the Intermix	
	Number	Number	%	Number	%	Number	%
Northern Region							
ID	667,796	280,217	42.0	200,815	30.1	79,402	11.9
MT	482,825	309,447	64.1	220,985	45.8	88,462	18.3
ND	317,498	59,153	18.6	44,949	14.2	14,204	4.5
Total	**1,468,119**	**648,817**	**44.2**	**466,749**	**31.8**	**182,068**	**12.4**
Rocky Mountain Region							
CO	2,212,898	937,460	42.4	666,448	30.1	271,012	12.2
KS	1,233,215	184,206	14.9	129,124	10.5	55,082	4.5
NE	796,793	121,419	15.2	85,959	10.8	35,460	4.5
SD	363,438	99,195	27.3	68,176	18.8	31,019	8.5
WY	261,868	215,317	82.2	168,691	64.4	46,626	17.8
Total	**4,868,212**	**1,557,597**	**32.0**	**1,118,398**	**23.0**	**439,199**	**9.0**
Southwestern Region							
AZ	2,844,526	1,365,916	48.0	970,076	34.1	395,840	13.9
NM	901,388	628,055	69.7	386,018	42.8	242,037	26.9
Total	**3,745,914**	**1,993,971**	**53.2**	**1,356,094**	**36.2**	**637,877**	**17.0**
Intermountain Region							
NV	1,173,814	539,837	46.0	448,552	38.2	91,285	7.8
UT	979,709	469,375	47.9	387,437	39.5	81,938	8.4
Total	**2,153,523**	**1,009,212**	**46.9**	**835,989**	**38.8**	**173,223**	**8.0**
Pacific Southwest Region							
CA	13,680,081	4,457,884	32.6	3,669,459	26.8	788,425	5.8
Pacific Northwest Region							
OR	1,675,562	603,293	36.0	418,204	25.0	185,089	11.0
WA	2,885,677	1,047,438	36.3	652,015	22.6	395,423	13.7
Total	**4,561,239**	**1,650,731**	**36.2**	**1,070,219**	**23.5**	**580,512**	**12.7**
Southern Region							
AL	2,171,853	1,277,511	58.8	679,688	31.3	597,823	27.5
AR	1,316,299	601,983	45.7	303,769	23.1	298,214	22.7
FL	8,989,580	2,568,569	28.6	1,763,014	19.6	805,555	9.0
GA	4,088,801	1,948,644	47.7	828,783	20.3	1,119,861	27.4
KY	1,927,164	669,646	34.7	292,025	15.2	377,621	19.6
LA	1,964,981	858,067	43.7	550,578	28.0	307,489	15.6
MS	1,274,719	736,785	57.8	355,795	27.9	380,990	29.9
NC	4,327,528	2,247,317	51.9	968,824	22.4	1,278,493	29.5
OK	1,664,378	647,082	38.9	386,372	23.2	260,710	15.7
SC	2,137,683	1,359,610	63.6	664,534	31.1	695,076	32.5
TN	2,812,133	1,065,410	37.9	505,532	18.0	559,878	19.9
TX	9,977,436	3,224,465	32.3	2,047,277	20.5	1,177,188	11.8
VA	3,364,939	1,417,596	42.1	714,551	21.2	703,045	20.9
Total	**46,017,494**	**18,622,686**	**40.5**	**10,060,743**	**21.9**	**8,561,943**	**18.6**
Eastern Region							
CT	1,487,891	800,475	53.8	441,695	29.7	358,780	24.1
DC	296,719	5,058	1.7	0	0.0	5,058	1.7
DE	405,885	44,125	10.9	12,688	3.1	31,437	7.7
IA	1,336,417	96,659	7.2	56,727	4.2	39,932	3.0
IL	5,296,715	382,650	7.2	282,969	5.3	99,681	1.9
IN	2,795,541	363,192	13.0	169,621	6.1	193,571	6.9
MA	2,808,254	1,190,126	42.4	714,525	25.4	475,601	16.9
MD	2,378,814	710,556	29.9	422,309	17.8	288,247	12.1
ME	721,830	581,853	80.6	205,971	28.5	375,882	52.1
MI	4,532,233	1,047,800	23.1	433,291	9.6	614,509	13.6
MN	2,347,201	436,622	18.6	178,291	7.6	258,331	11.0
MO	2,712,729	575,766	21.2	251,066	9.3	324,700	12.0
NH	614,754	507,781	82.6	223,508	36.4	284,273	46.2
NJ	3,553,562	894,580	25.2	578,543	16.3	316,037	8.9
NY	8,108,103	1,809,098	22.3	951,803	11.7	857,295	10.6
OH	5,127,508	831,269	16.2	432,405	8.4	398,864	7.8
PA	5,567,315	2,054,697	36.9	1,213,689	21.8	841,008	15.1
RI	463,388	130,058	28.1	69,611	15.0	60,447	13.0
VT	322,539	228,490	70.8	95,213	29.5	133,277	41.3
WI	2,624,358	511,330	19.5	205,704	7.8	305,626	11.6
WV	881,917	688,921	78.1	394,300	44.7	294,621	33.4
Total	**54,383,673**	**13,891,109**	**25.5**	**7,333,932**	**13.5**	**6,557,177**	**12.1**
Grand Total	**130,878,255**	**43,832,007**	**33.5**	**25,911,583**	**19.8**	**17,920,424**	**13.7**

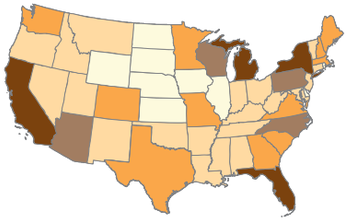
Fire at Carlton Complex, Methow Valley, Washington, July 2014. Photo by Kari Greer, used with permission

Seasonal Homes in the WUI

Although seasonal homes represent a small proportion of all homes in the United States (3.5 percent), they are likely to occur within the WUI since wildlands provide the natural amenities—scenic views, natural beauty, and quiet settings—that attract seasonal residents. Of the 4.6 million seasonal houses in the conterminous United States, 59 percent of them occur within the WUI (Table 4).

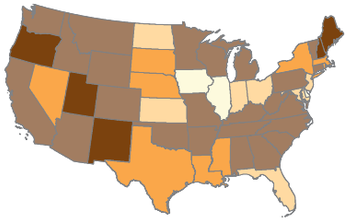
States with the greatest number of seasonal homes in the WUI are Florida (225,000) and California (204,000), followed by Michigan and New York (Fig. 4, Table 4). States with the fewest seasonal homes in the WUI include those in the north-central area of the United States. When considering the number of WUI seasonal homes as a percentage of all seasonal homes, 61 percent of States have 60 to 80 percent of their seasonal homes within the WUI. States with the highest percentage (>80 percent) of their seasonal homes in the WUI include New Hampshire and Maine in the east, and Utah, Oregon, and New Mexico in the west (Fig. 4 Table 4).

High proportions of seasonal homes provide both benefits and challenges for communities. Seasonal homes draw people from outside the area who spend money locally on a variety of goods and services. Because seasonal-home owners earn their paychecks elsewhere, their spending, like any tourism spending, has an economic multiplier effect that can boost the economy of a small community. Tourism economies have become important in many rural areas where natural resource extraction, such as logging and mining, has declined. On the other hand, seasonal homes concentrations can complicate WUI land management because seasonal residents are often absent, making it difficult to coordinate programs and activities in a neighborhood or across ownerships (Winter et al. 2002). For example, the Firewise program (NFPA 2014), which teaches and supports home and landscape maintenance to reduce fire risk, is less effective reaching seasonal than permanent residents. Seasonal residents have limited time at their vacation home and many do not want to spend their vacation clearing brush or cleaning their gutters (Bright and Burtz 2006). For these reasons, concentrations of seasonal homes within the WUI deserve attention.



Number of Seasonal Homes in the WUI by State

- 150,001-225,473
- 100,001-150,000
- 50,001-100,000
- 10,001-50,000
- 87-10,000



Number of Seasonal Homes in the WUI Relative to the Total Seasonal Homes in the State (%)

- 80.1-91.5
- 60.1-80.0
- 40.1-60.0
- 20.1-40.0
- 2.5-20.0

Figure 4.—Seasonal homes in the WUI by State.

Table 4.—Seasonal homes in the WUI by State and by Forest Service Region. A map with the Forest Service Regions used in this study can be found on page 23.

Region/ State	All seasonal homes	Seasonal homes in the WUI		In the Interface		In the Intermix	
	Number	Number	%	Number	%	Number	%
Northern Region							
ID	41,660	32,826	78.8	9,272	22.3	23,554	56.5
MT	38,510	26,580	69.0	8,283	21.5	18,297	47.5
ND	11,483	4,429	38.6	2,273	19.8	2,156	18.8
Total	**91,653**	**63,835**	**69.6**	**19,828**	**21.6**	**44,007**	**48.0**
Rocky Mountain Region							
CO	101,965	81,292	79.7	33,835	33.2	47,457	46.5
KS	12,763	4,041	31.7	2,168	17.0	1,873	14.7
NE	13,881	6,073	43.8	2,375	17.1	3,698	26.6
SD	13,277	5,673	42.7	2,272	17.1	3,401	25.6
WY	14,892	9,316	62.6	3,233	21.7	6,083	40.8
Total	**156,778**	**106,395**	**67.9**	**43,883**	**28.0**	**62,512**	**39.9**
Southwestern Region							
AZ	184,327	131,595	71.4	86,964	47.2	44,631	24.2
NM	36,612	29,374	80.2	8,097	22.1	21,277	58.1
Total	**220,939**	**160,969**	**72.9**	**95,061**	**43.0**	**65,908**	**29.8**
Intermountain Region							
NV	32,703	18,770	57.4	13,879	42.4	4,891	15.0
UT	47,978	38,942	81.2	14,559	30.3	24,383	50.8
Total	**80,681**	**57,711**	**71.5**	**28,437**	**35.2**	**29,274**	**36.3**
Pacific Southwest Region							
CA	302,815	204,476	67.5	118,721	39.2	85,755	28.3
Pacific Northwest Region							
OR	55,473	44,582	80.4	23,517	42.4	21,065	38.0
WA	89,907	67,498	75.1	23,351	26.0	44,147	49.1
Total	**145,380**	**112,080**	**77.1**	**46,868**	**32.2**	**65,212**	**44.9**
Southern Region							
AL	63,890	45,537	71.3	20,109	31.5	25,428	39.8
AR	38,153	23,801	62.4	6,224	16.3	17,577	46.1
FL	657,070	225,473	34.3	170,187	25.9	55,286	8.4
GA	81,511	62,326	76.5	14,644	18.0	47,682	58.5
KY	38,616	24,218	62.7	5,606	14.5	18,612	48.2
LA	42,253	21,909	51.9	6,497	15.4	15,412	36.5
MS	28,867	16,579	57.4	6,730	23.3	9,849	34.1
NC	191,508	144,879	75.7	57,421	30.0	87,458	45.7
OK	35,187	22,864	65.0	8,068	22.9	14,796	42.0
SC	112,531	73,604	65.4	38,705	34.4	34,899	31.0
TN	60,778	45,158	74.3	13,530	22.3	31,628	52.0
TX	208,733	99,161	47.5	45,758	21.9	53,403	25.6
VA	80,468	54,725	68.0	19,126	23.8	35,599	44.2
Total	**1,639,565**	**860,233**	**52.5**	**412,604**	**25.2**	**447,629**	**27.3**
Eastern Region							
CT	29,618	21,504	72.6	9,974	33.7	11,530	38.9
DC	3,537	87	2.5	0	0.0	87	2.5
DE	35,939	4,661	13.0	716	2.0	3,945	11.0
IA	21,020	3,702	17.6	917	4.4	2,785	13.2
IL	47,289	8,156	17.2	2,593	5.5	5,563	11.8
IN	45,571	13,748	30.2	3,848	8.4	9,900	21.7
MA	115,630	65,760	56.9	32,346	28.0	33,414	28.9
MD	55,786	16,816	30.1	5,873	10.5	10,943	19.6
ME	118,310	98,738	83.5	20,423	17.3	78,315	66.2
MI	263,071	186,662	71.0	58,979	22.4	127,683	48.5
MN	130,471	79,458	60.9	7,097	5.4	72,361	55.5
MO	80,374	55,473	69.0	20,357	25.3	35,116	43.7
NH	63,910	58,501	91.5	14,714	23.0	43,787	68.5
NJ	134,903	36,211	26.8	28,037	20.8	8,174	6.1
NY	289,301	173,447	60.0	51,798	17.9	121,649	42.0
OH	58,591	18,504	31.6	6,890	11.8	11,614	19.8
PA	161,582	120,265	74.4	35,368	21.9	84,897	52.5
RI	17,077	8,385	49.1	4,236	24.8	4,149	24.3
VT	50,198	38,869	77.4	7,414	14.8	31,455	62.7
WI	193,046	124,743	64.6	15,017	7.8	109,726	56.8
WV	38,283	26,508	69.2	9,813	25.6	16,695	43.6
Total	**1,953,507**	**1,160,199**	**59.4**	**336,411**	**17.2**	**823,788**	**42.2**
Grand Total	**4,591,318**	**2,725,899**	**59.4**	**1,101,814**	**24.0**	**1,624,085**	**35.4**

Population in the WUI

As of 2010, the WUI is home to about 99 million people, or about one-third of all people in the United States (Table 1). The number of people in the WUI follows a pattern similar to WUI housing, but where seasonal homes are concentrated, housing exceeds population because the U.S. Census does not include seasonal residents in its population count. States with the greatest number of people in the WUI are California (11.2 million) and Texas (8.0 million), followed by Florida, North Carolina, and Georgia with 4.6 to 5.3 million people in the WUI (Fig. 5, Table 5). When we consider the number of people in the WUI as a proportion (percent) of the entire State's population, many of those States with low population (e.g., Wyoming and Montana in the west, Maine and New Hampshire in the east) have a high percentage of their population in the WUI (60 to 82 percent) (Fig. 5, Table 5).

WUI residents come from many different social strata (Paveglio et al. 2009). Some live in modest homes located where land is least expensive, typically far from high-priced urban areas. When a concentration of such homes occurs in or near wildland vegetation, those neighborhoods are part of the WUI. At the other end of the scale, spectacular homes are set in or within sight of the most scenic natural settings. Where enclaves of such homes exist, these, too, are in the WUI. In between these extremes, many suburbs and exurbs, whether exclusive neighborhoods within reach of the city or affordable developments just beyond the expensive urban market, are also WUI areas. There are so many people living in the WUI—approximately a third of the U.S. population—that few generalizations are useful or valid. Instead, wide variation in home construction, neighborhood characteristics, and the residents themselves characterize the WUI.

Pagami Creek fire, Superior National Forest, September 2011. Photo by Kari Greer, used with permission.

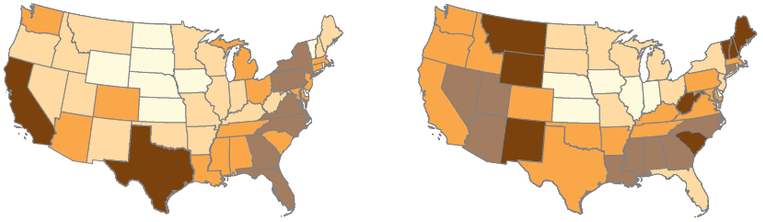


Figure 5.—Population in the WUI by State.

Table 5.—Population in the WUI by State and by Forest Service Region. A map with the Forest Service Regions used in this study can be found on page 23.

Region/ State	Total population	Population in the WUI		In the Interface		In the Intermix	
	Number	Number	%	Number	%	Number	%
Northern Region							
ID	1,567,582	564,236	36.0	436,138	27.8	128,098	8.2
MT	989,415	617,276	62.4	455,542	46.0	161,734	16.3
ND	672,591	125,656	18.7	96,194	14.3	29,462	4.4
Total	**3,229,588**	**1,307,168**	**40.5**	**987,874**	**30.6**	**319,294**	**9.9**
Rocky Mountain Region							
CO	5,029,196	2,029,948	40.4	1,507,124	30.0	522,824	10.4
KS	2,853,118	415,813	14.6	284,703	10.0	131,110	4.6
NE	1,826,341	257,677	14.1	183,850	10.1	73,827	4.0
SD	814,180	216,528	26.6	148,685	18.3	67,843	8.3
WY	563,626	463,358	82.2	366,454	65.0	96,904	17.2
Total	**11,086,461**	**3,383,325**	**30.5**	**2,490,817**	**22.5**	**892,508**	**8.1**
Southwestern Region							
AZ	6,392,017	2,887,087	45.2	2,054,894	32.1	832,193	13.0
NM	2,059,179	1,434,855	69.7	901,839	43.8	533,016	25.9
Total	**8,451,196**	**4,321,942**	**51.1**	**2,956,733**	**35.0**	**1,365,209**	**16.2**
Intermountain Region							
NV	2,700,551	1,233,685	45.7	1,033,208	38.3	200,477	7.4
UT	2,763,885	1,254,794	45.4	1,096,507	39.7	158,287	5.7
Total	**5,464,436**	**2,488,479**	**45.5**	**2,129,715**	**39.0**	**358,764**	**6.6**

Region/ State	Total population	Population in the WUI		In the Interface		In the Intermix	
	Number	Number	%	Number	%	Number	%
Pacific Southwest Region							
CA	37,253,956	11,244,948	30.2	9,497,975	25.5	1,746,973	4.7
Pacific Northwest Region							
OR	3,831,074	1,247,270	32.6	872,323	22.8	374,947	9.8
WA	6,724,540	2,397,040	35.6	1,540,928	22.9	856,112	12.7
Total	**10,555,614**	**3,644,310**	**34.5**	**2,413,251**	**22.9**	**1,231,059**	**11.7**
Southern Region							
AL	4,779,736	2,805,073	58.7	1,472,492	30.8	1,332,581	27.9
AR	2,915,918	1,296,936	44.5	660,959	22.7	635,977	21.8
FL	18,801,310	5,312,863	28.3	3,585,451	19.1	1,727,412	9.2
GA	9,687,653	4,601,099	47.5	1,947,991	20.1	2,653,108	27.4
KY	4,339,367	1,490,312	34.3	654,406	15.1	835,906	19.3
LA	4,533,372	2,046,746	45.1	1,332,574	29.4	714,172	15.8
MS	2,967,297	1,688,026	56.9	793,422	26.7	894,604	30.1
NC	9,535,483	4,835,825	50.7	2,073,845	21.7	2,761,980	29.0
OK	3,751,351	1,441,389	38.4	850,557	22.7	590,832	15.7
SC	4,625,364	2,924,136	63.2	1,395,384	30.2	1,528,752	33.1
TN	6,346,105	2,319,356	36.5	1,101,782	17.4	1,217,574	19.2
TX	25,145,561	8,010,020	31.9	5,140,108	20.4	2,869,912	11.4
VA	8,001,024	3,288,128	41.1	1,674,386	20.9	1,613,742	20.2
Total	**105,429,541**	**42,059,909**	**39.9**	**22,683,357**	**21.5**	**19,376,552**	**18.4**

Region/ State	Total population	Population in the WUI		In the Interface		In the Intermix	
	Number	Number	%	Number	%	Number	%
Eastern Region							
CT	3,574,097	1,927,202	53.9	1,022,262	28.6	904,940	25.3
DC	601,723	8,782	1.5	0	0.0	8,782	1.5
DE	897,934	97,979	10.9	30,738	3.4	67,241	7.5
IA	3,046,355	219,332	7.2	128,526	4.2	90,806	3.0
IL	12,830,632	923,712	7.2	700,097	5.5	223,615	1.7
IN	6,483,802	832,414	12.8	387,937	6.0	444,477	6.9
MA	6,547,629	2,787,545	42.6	1,630,057	24.9	1,157,488	17.7
MD	5,773,552	1,759,009	30.5	1,036,463	18.0	722,546	12.5
ME	1,328,361	1,066,981	80.3	390,267	29.4	676,714	50.9
MI	9,883,640	1,981,988	20.1	836,224	8.5	1,145,764	11.6
MN	5,303,925	842,617	15.9	389,290	7.3	453,327	8.5
MO	5,988,927	1,211,219	20.2	529,200	8.8	682,019	11.4
NH	1,316,470	1,075,288	81.7	474,891	36.1	600,397	45.6
NJ	8,791,894	2,214,916	25.2	1,392,325	15.8	822,591	9.4
NY	19,378,102	3,945,597	20.4	2,148,285	11.1	1,797,312	9.3
OH	11,536,504	1,896,531	16.4	965,764	8.4	930,767	8.1
PA	12,702,379	4,462,073	35.1	2,643,498	20.8	1,818,575	14.3
RI	1,052,567	299,270	28.4	153,259	14.6	146,011	13.9
VT	625,741	426,080	68.1	191,043	30.5	235,037	37.6
WI	5,686,986	857,294	15.1	416,801	7.3	440,493	7.7
WV	1,852,994	1,428,935	77.1	796,275	43.0	632,660	34.1
Total	**125,204,214**	**30,264,764**	**24.2**	**16,263,202**	**13.0**	**14,001,562**	**11.2**
Grand Total	**306,675,006**	**98,714,846**	**32.2**	**59,422,925**	**19.4**	**39,291,921**	**12.8**

State WUI maps

State WUI maps begin on page 23 and show information specific for each State. The "sections" of the State WUI maps are shown in Figure 6 as a way of explanation. The sections are: State overview, 2010 WUI map, statistical summary of the WUI, wildfire history, and auxiliary maps. The State WUI maps are organized alphabetically, depicting also the U.S. Forest Service administrative region they belong to (Northern, Rocky Mountain, Southwestern, Intermountain, Pacific Southwest, Pacific Northwest, Southern, and Eastern Regions; see page 23). In this study, Idaho is part of the Northern Region and Wyoming is part of the Rocky Mountain Region; these are the only difference from the original administrative regions. All maps were analyzed using a color blindness simulator (http://colororacle.org) to ensure their legibility for all users. Numbered items below refer to sections depicted in Figure 6.

1. State overview—reports demographic and geographic facts, including population and number of houses (from the 2010 census), extent of publicly and privately owned lands (from PAD-US), and extent of major land cover types (from NLCD 2006) (Fig. 6).

2. WUI map—displays the distribution of the 2010 WUI, including intermix and interface WUI, as well as the non-WUI classes. County boundaries, major cities, and roads are also shown. All scale bars are approximate.

3. WUI in numbers—offers a statistical portrait of the WUI for the corresponding State, including the geographic extent of the WUI and non-WUI classes (in km^2 and by percentage), and the population and number of houses in the different WUI and non-WUI classes. Classes with values <1 percent are not displayed in pie charts.

4. Wildfire history—shows the annual number of wildfires between 2002 and 2010, and the area burned by these wildfires, based on data from the National Interagency Fire Center (NIFC 2014).

5. Auxiliary maps—display the data used to create the WUI maps, including:

   - Housing density—Shows the density of houses by census block, based on the 2010 census.
   - Land cover—Shows the natural land covers and anthropogenic land uses according to the NLCD 2006.
   - Wildland vegetation—Shows the percentage of wildland vegetation cover per census block, based on the NLCD 2006. Wildland vegetation includes forests (coniferous, deciduous and mixed), grasslands, shrubs, and wetlands.
   - Land ownership—Shows the distribution of private and public lands in the State. The categories for publicly-owned lands distinguish between major governmental levels, including Federal (lands managed by Federal agencies such as National Forests, National Parks, and National Wildlife Refuges), State (lands managed by State agencies such as State Parks and Recreation Areas), and local level (lands managed by cities, counties, towns, and others).

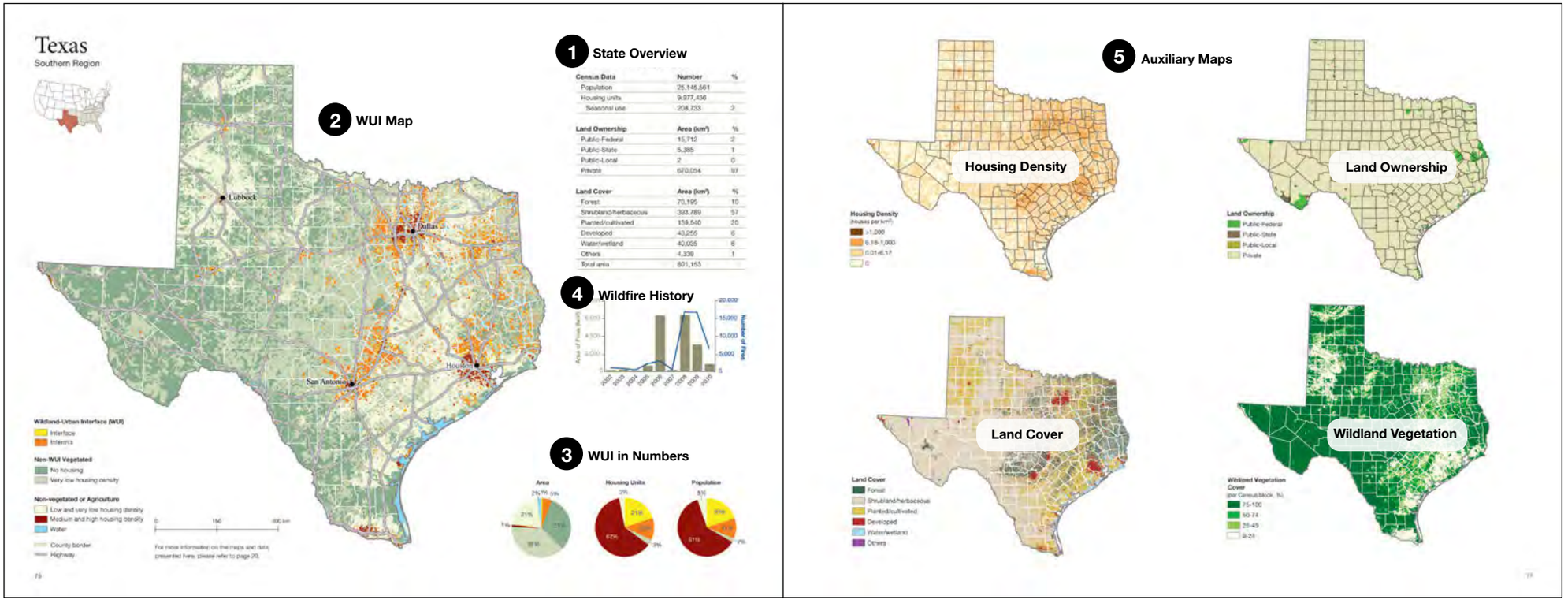
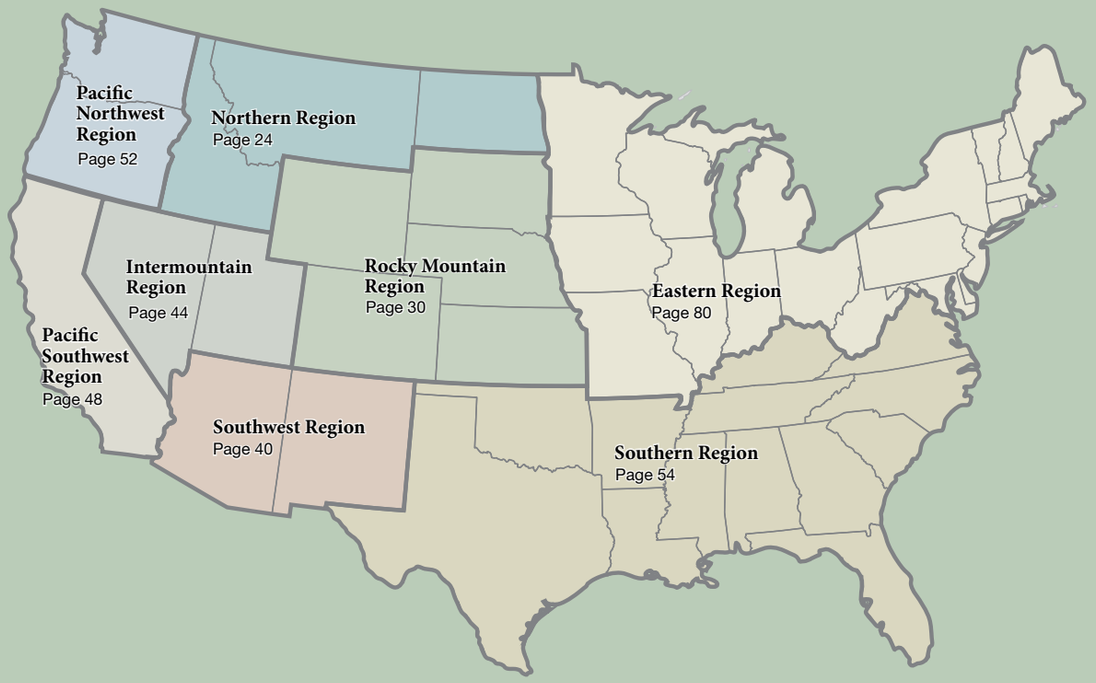


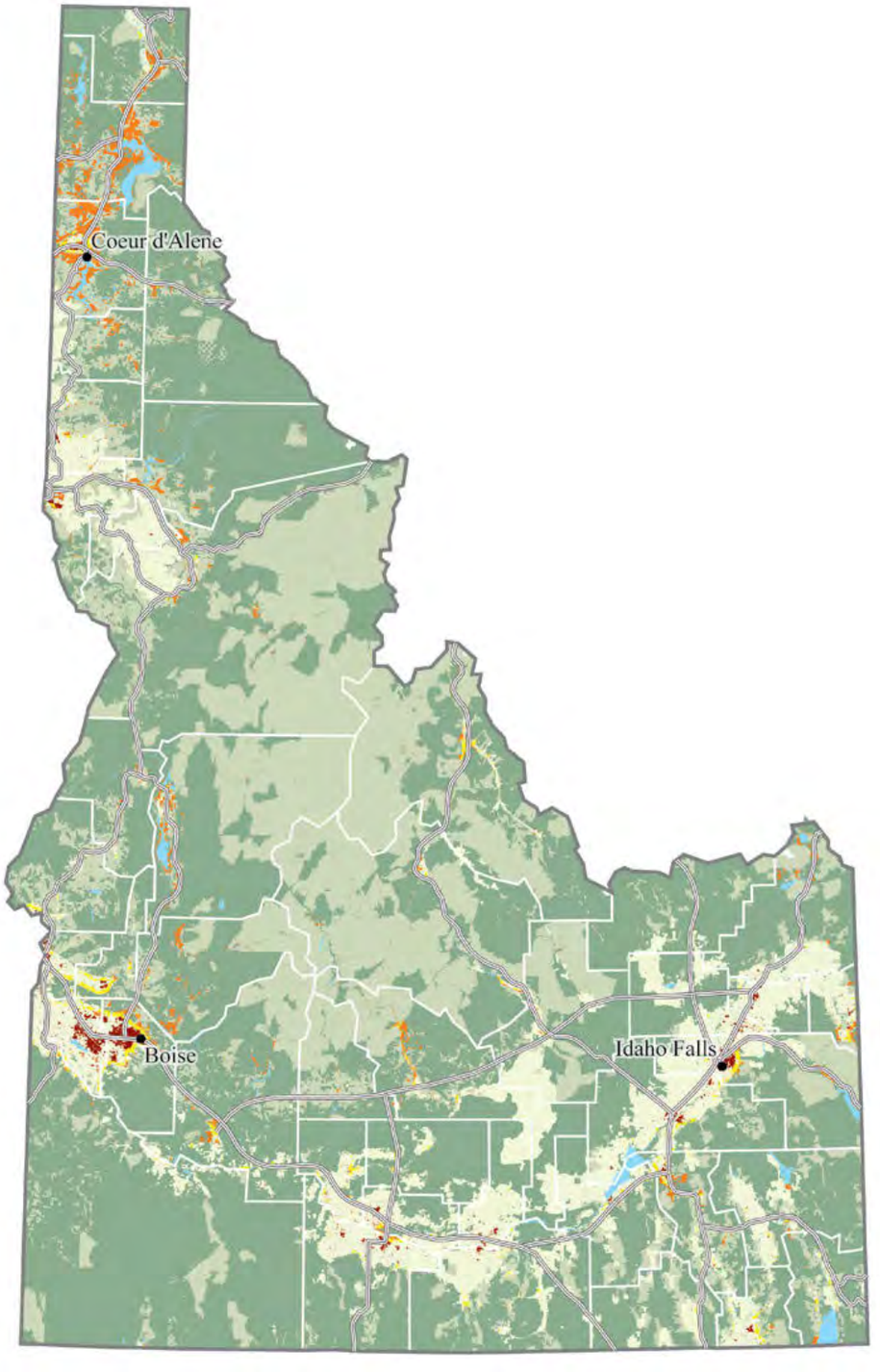
Figure 6.—Sections of the State-level WUI products. The layout may vary for some States.

The 2010 Wildland-Urban Interface of the Conterminous United States:
Data & Maps



Idaho

Northern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 75 150 km

For more information on the maps and data presented here, please refer to page 20.

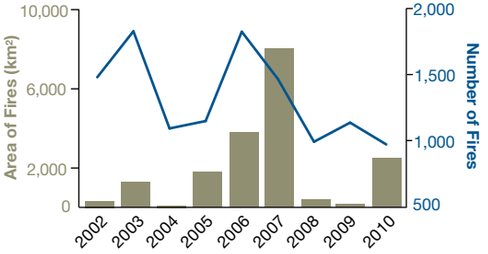
Population and Geography Overview

Census Data	Number	%
Population	1,567,582	
Housing units	667,796	
Seasonal use	41,660	6

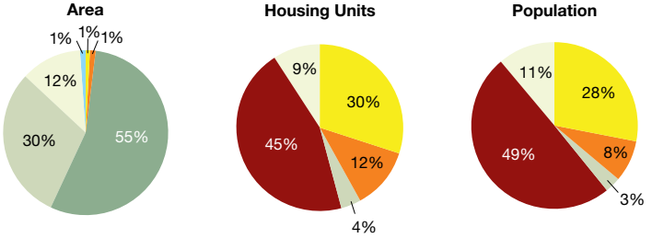
Land Ownership	Area (km²)	%
Public-Federal	141,877	66
Public-State	10,998	5
Public-Local	14	0
Private	63,553	29

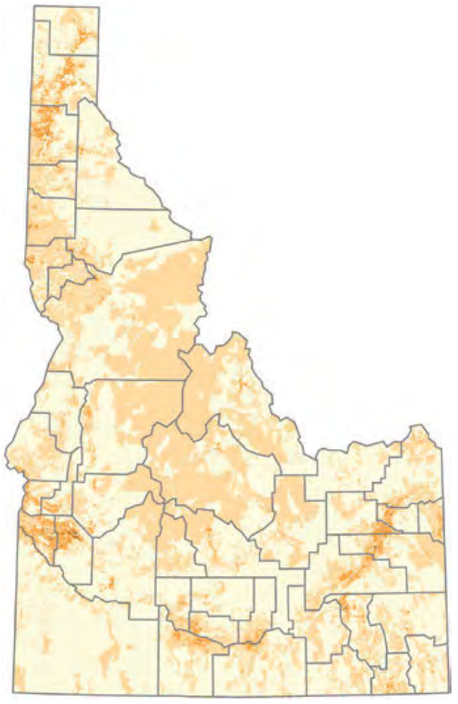
Land Cover	Area (km²)	%
Forest	70,787	33
Shrubland/herbaceous	111,696	52
Planted/cultivated	23,355	11
Developed	3,656	2
Water/wetland	4,000	2
Others	2,949	1
Total area	216,442	

Wildfire History

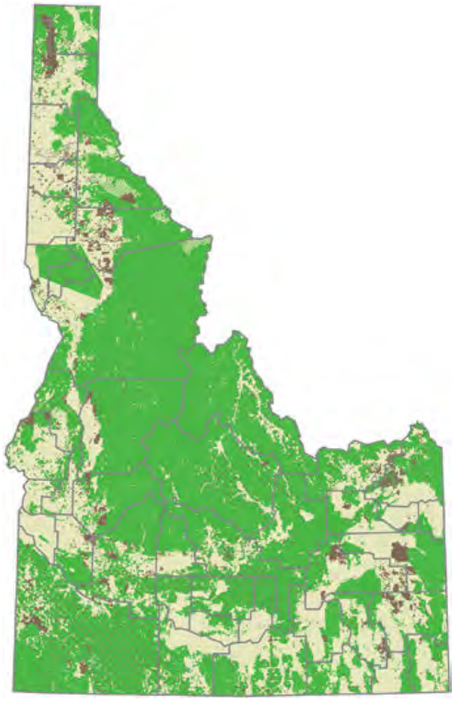


WUI in Numbers (see legend)

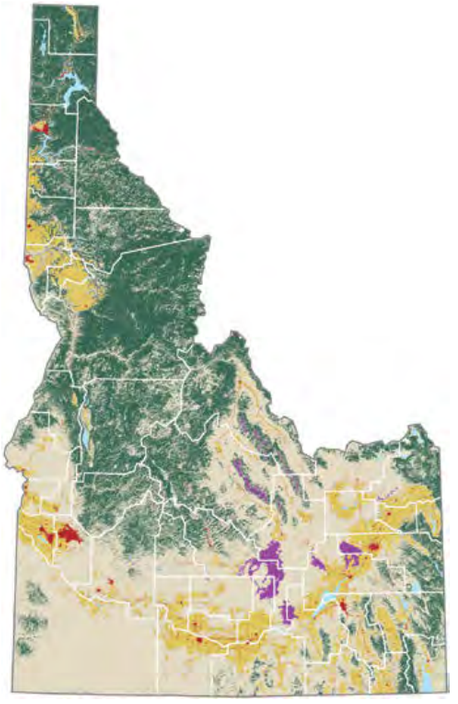




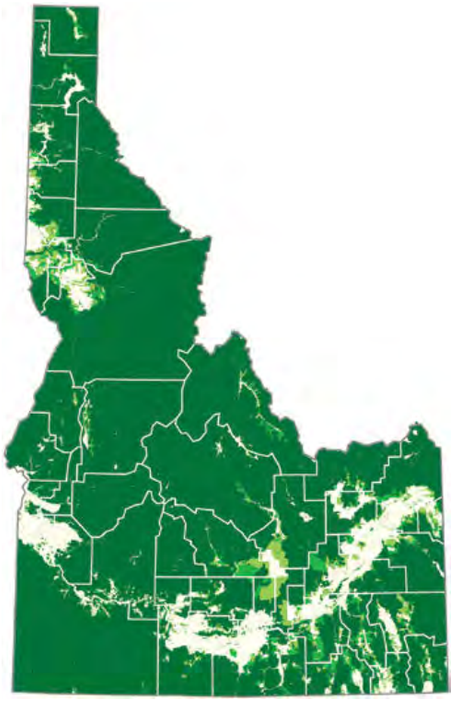
Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private



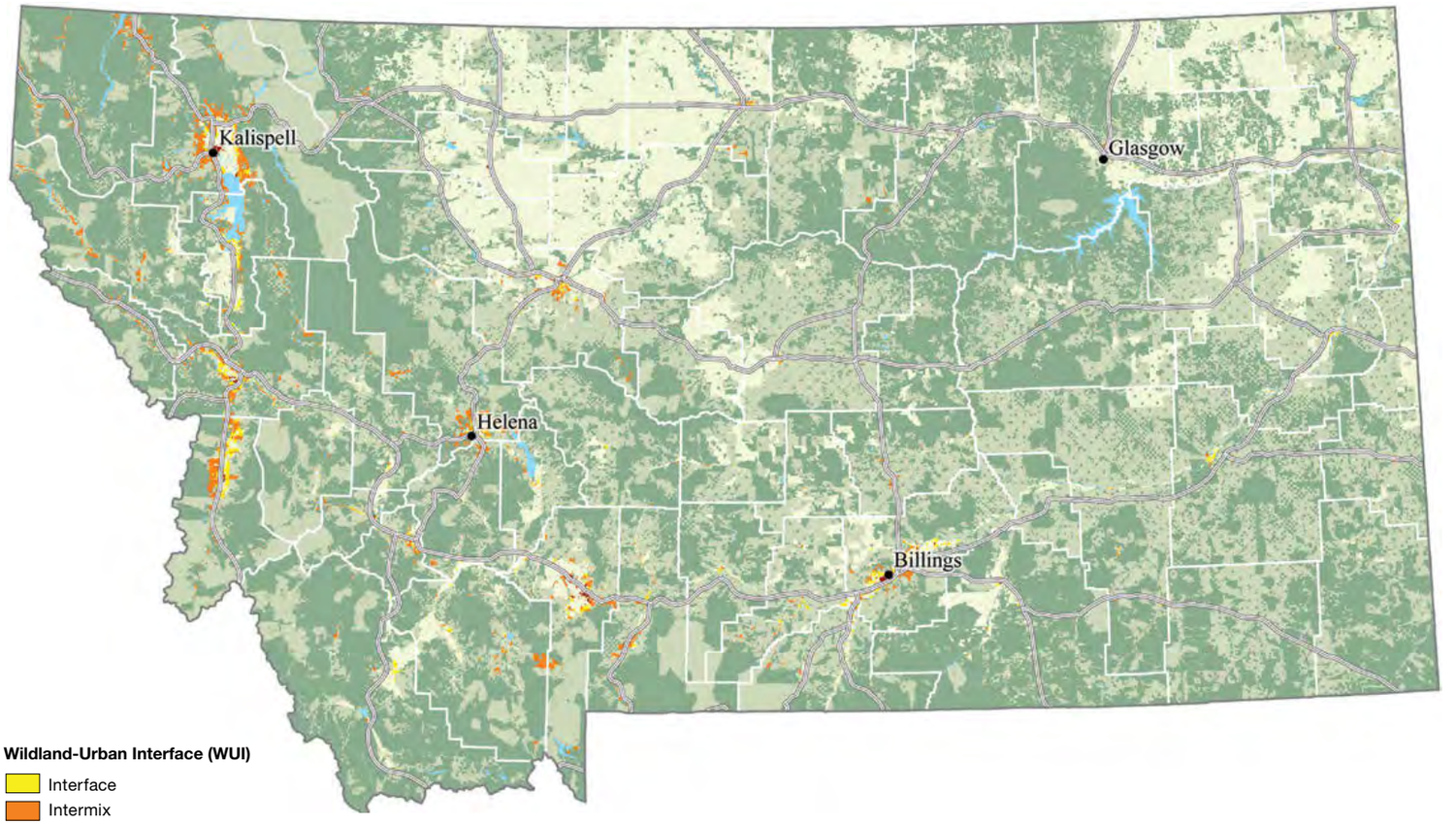
Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

Montana

Northern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 75 150 km

For more information on the maps and data presented here, please refer to page 20.

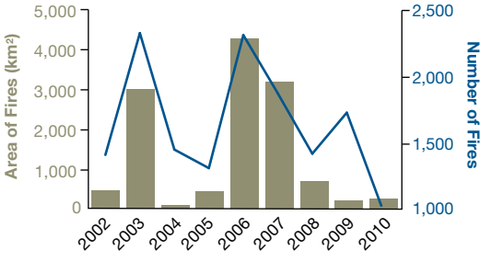
Population and Geography Overview

Census Data	Number	%
Population	989,415	
Housing units	482,825	
Seasonal use	38,510	8

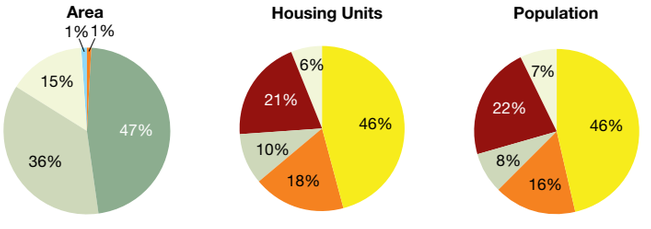
Land Ownership	Area (km²)	%
Public-Federal	126,199	33
Public-State	22,608	6
Public-Local	6,632	2
Private	225,392	59

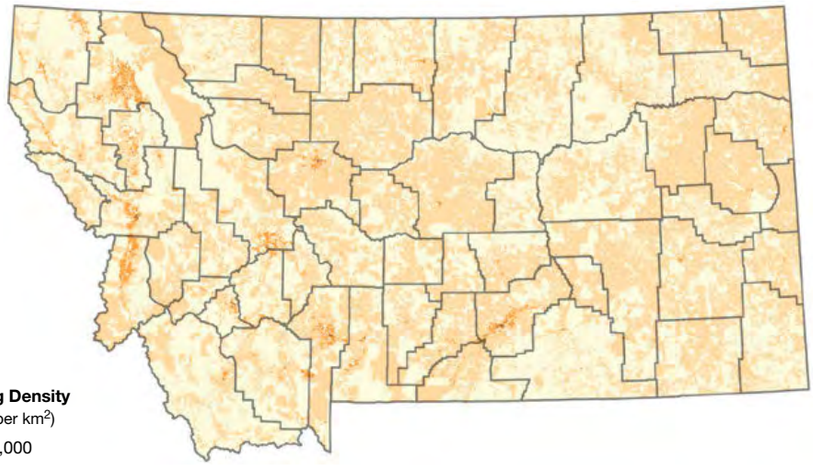
Land Cover	Area (km²)	%
Forest	82,685	22
Shrubland/herbaceous	220,467	58
Planted/cultivated	61,095	16
Developed	5,143	1
Water/wetland	9,172	2
Others	2,268	1
Total area	380,831	

Wildfire History

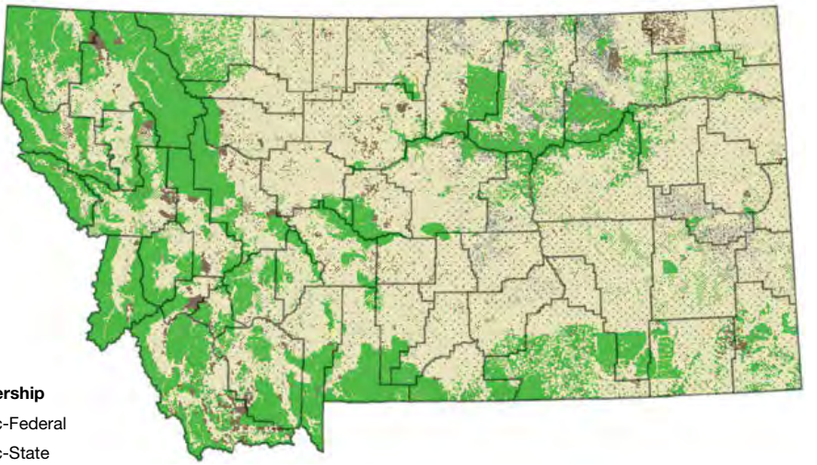


WUI in Numbers (see legend)

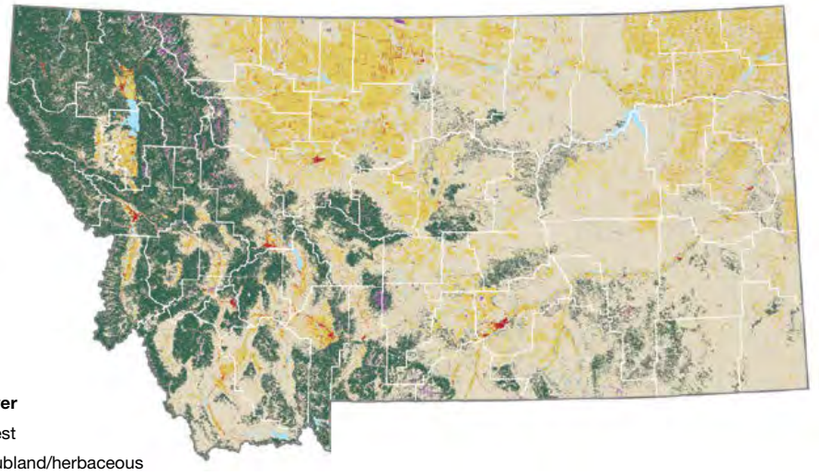




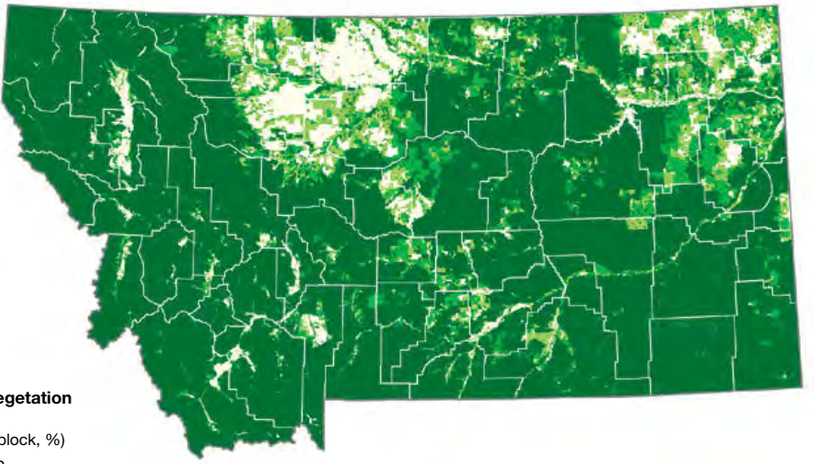
Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private



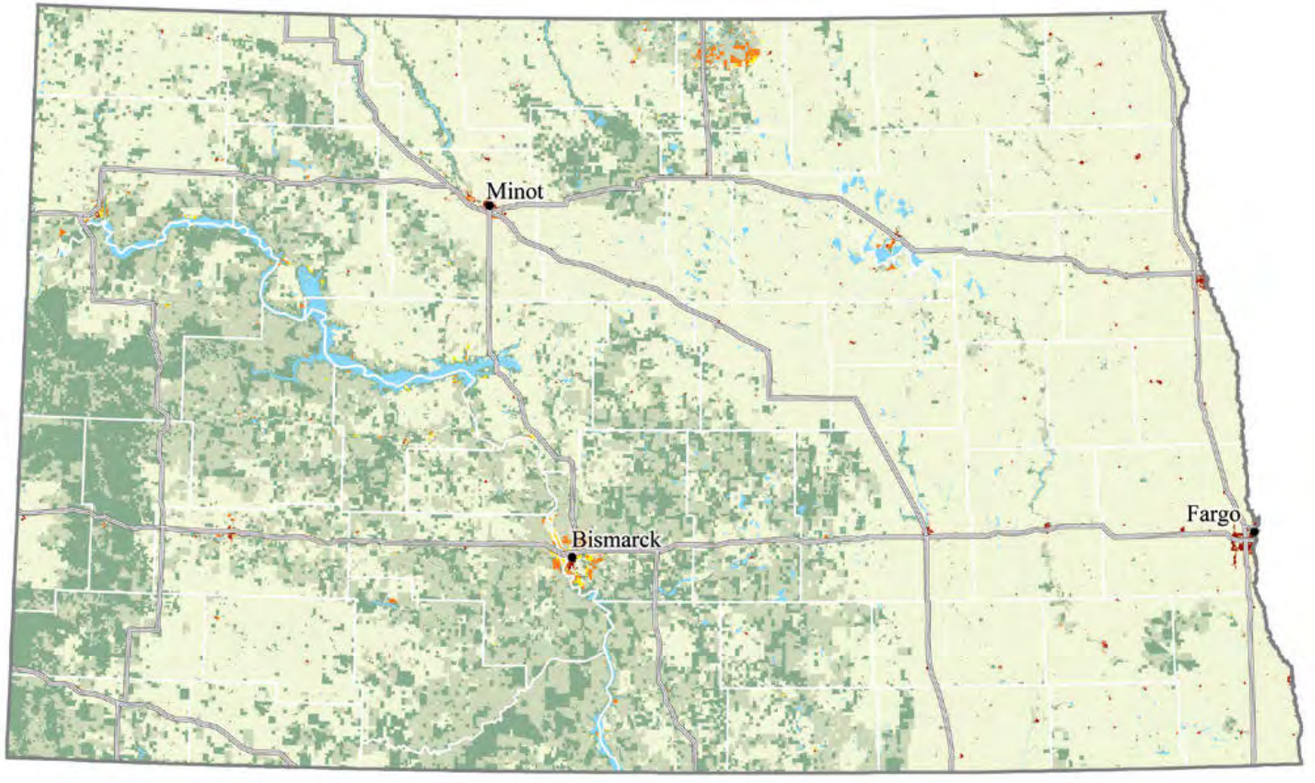
Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

North Dakota

Northern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

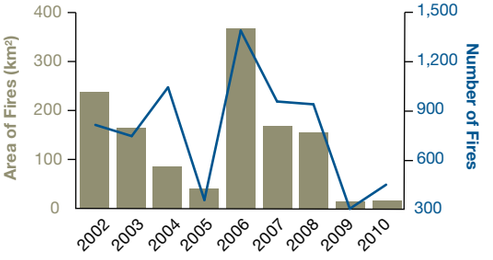
Population and Geography Overview

Census Data	Number	%
Population	672,591	
Housing units	317,498	
Seasonal use	11,483	4

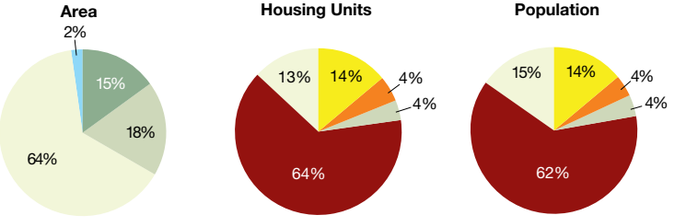
Land Ownership	Area (km²)	%
Public-Federal	17,501	10
Public-State	3,808	2
Public-Local	0	0
Private	161,799	88

Land Cover	Area (km²)	%
Forest	3,168	2
Shrubland/herbaceous	56,281	31
Planted/cultivated	101,220	55
Developed	7,279	4
Water/wetland	14,693	8
Others	468	0
Total area	183,108	

Wildfire History

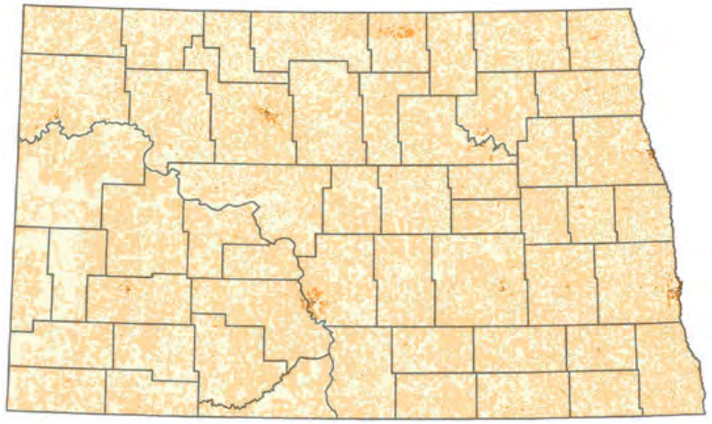


WUI in Numbers (see legend)



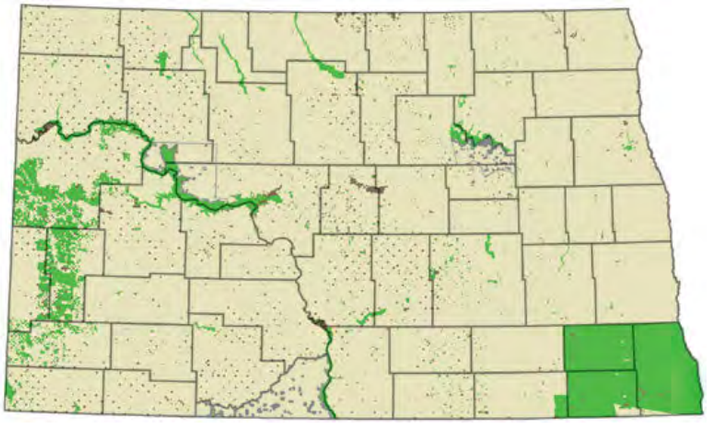
Housing Density
(houses per km^2)

- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



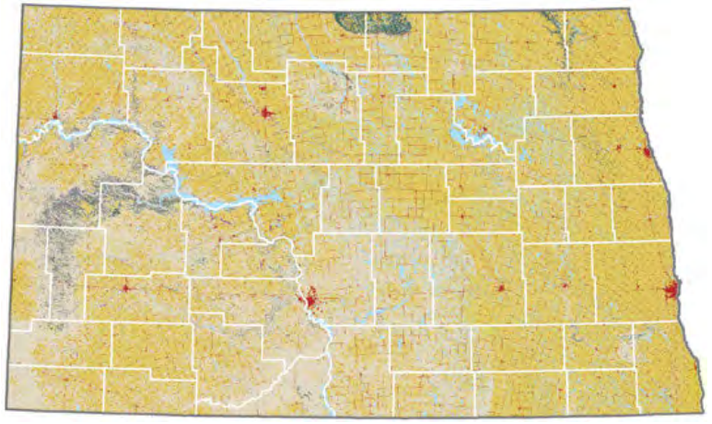
Land Ownership

- Public-Federal
- Public-State
- Public-Local
- Private



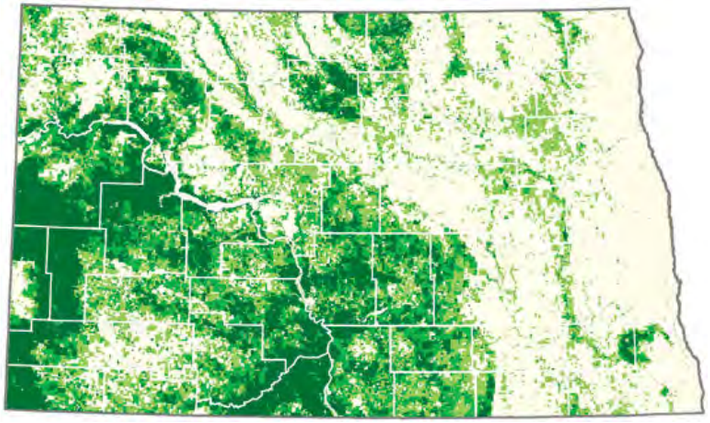
Land Cover

- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



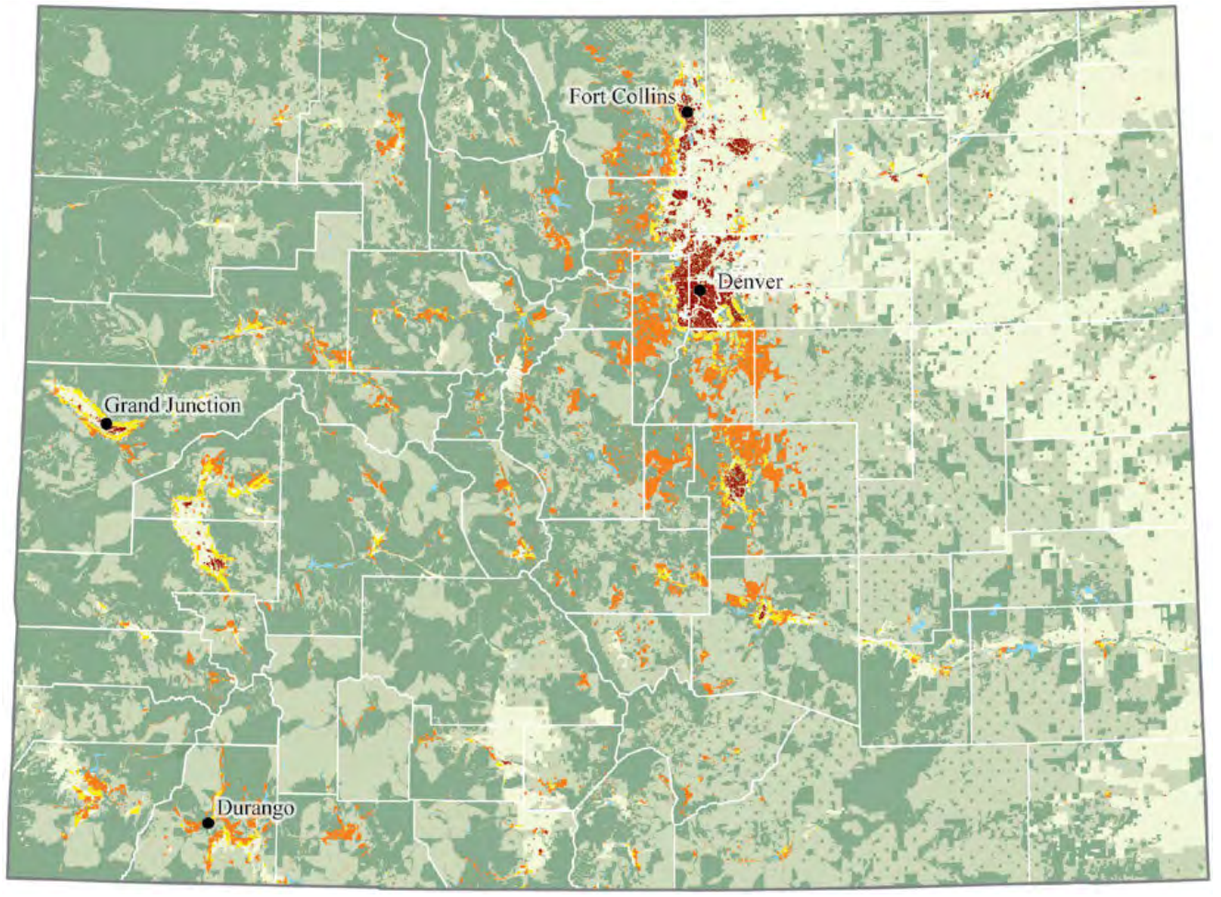
Wildland Vegetation Cover
(per Census block, %)

- 75-100
- 50-74
- 25-49
- 0-24



Colorado

Rocky Mountain Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 75 150 km

For more information on the maps and data presented here, please refer to page 20.

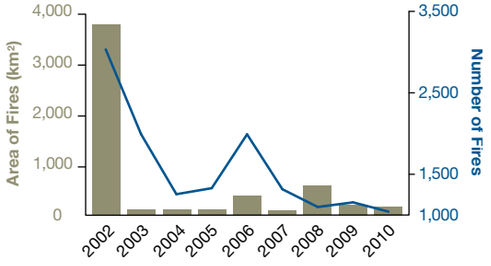
Population and Geography Overview

Census Data	Number	%
Population	5,029,196	
Housing units	2,212,898	
Seasonal use	101,965	5

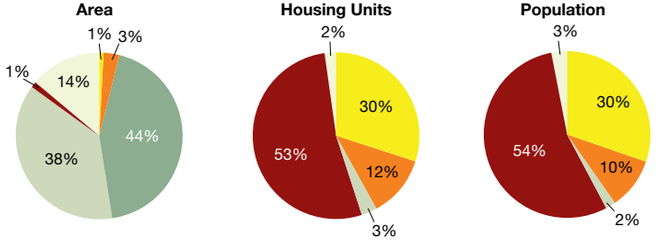
Land Ownership	Area (km²)	%
Public-Federal	97,238	36
Public-State	13,125	5
Public-Local	1,835	1
Private	157,404	58

Land Cover	Area (km²)	%
Forest	77,109	29
Shrubland/herbaceous	136,907	51
Planted/cultivated	38,192	14
Developed	7,496	3
Water/wetland	5,094	2
Others	4,805	2
Total area	269,602	

Wildfire History

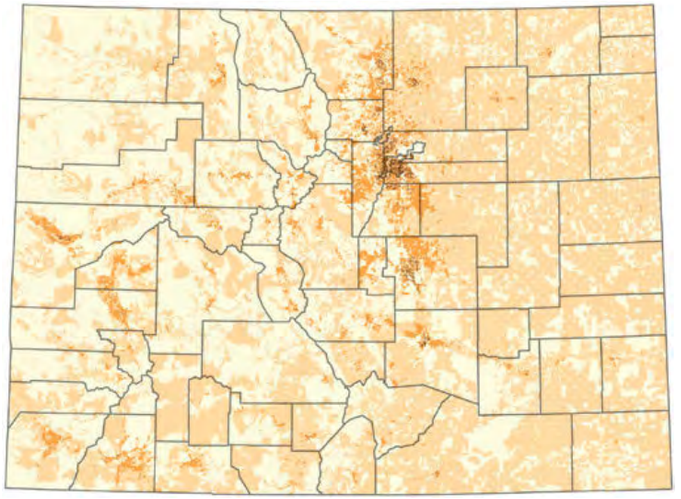


WUI in Numbers (see legend)



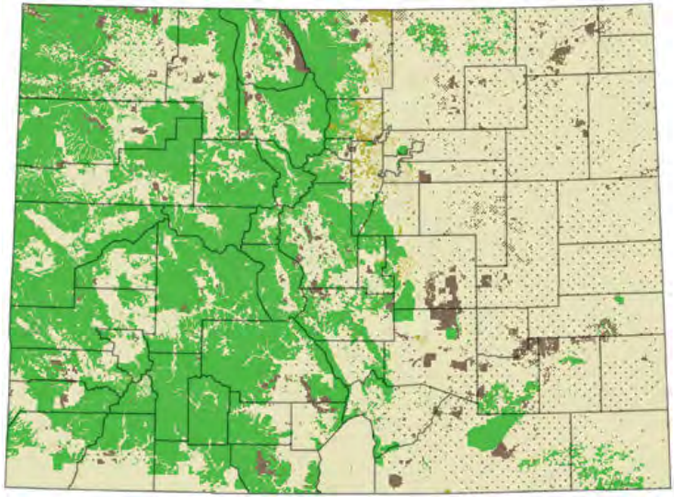
Housing Density
(houses per km^2)

- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



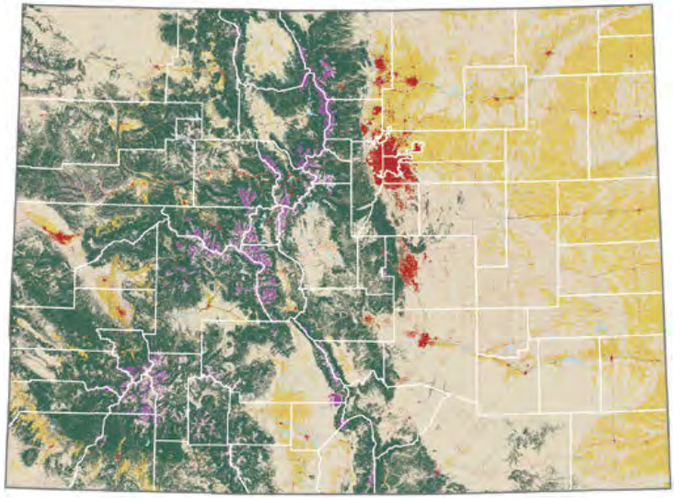
Land Ownership

- Public-Federal
- Public-State
- Public-Local
- Private



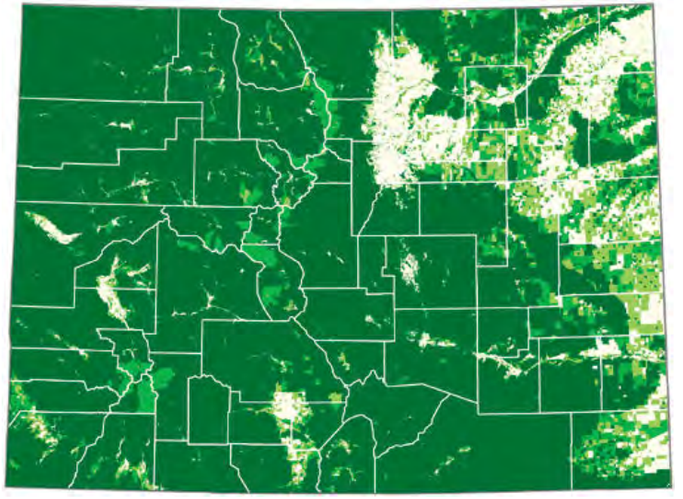
Land Cover

- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



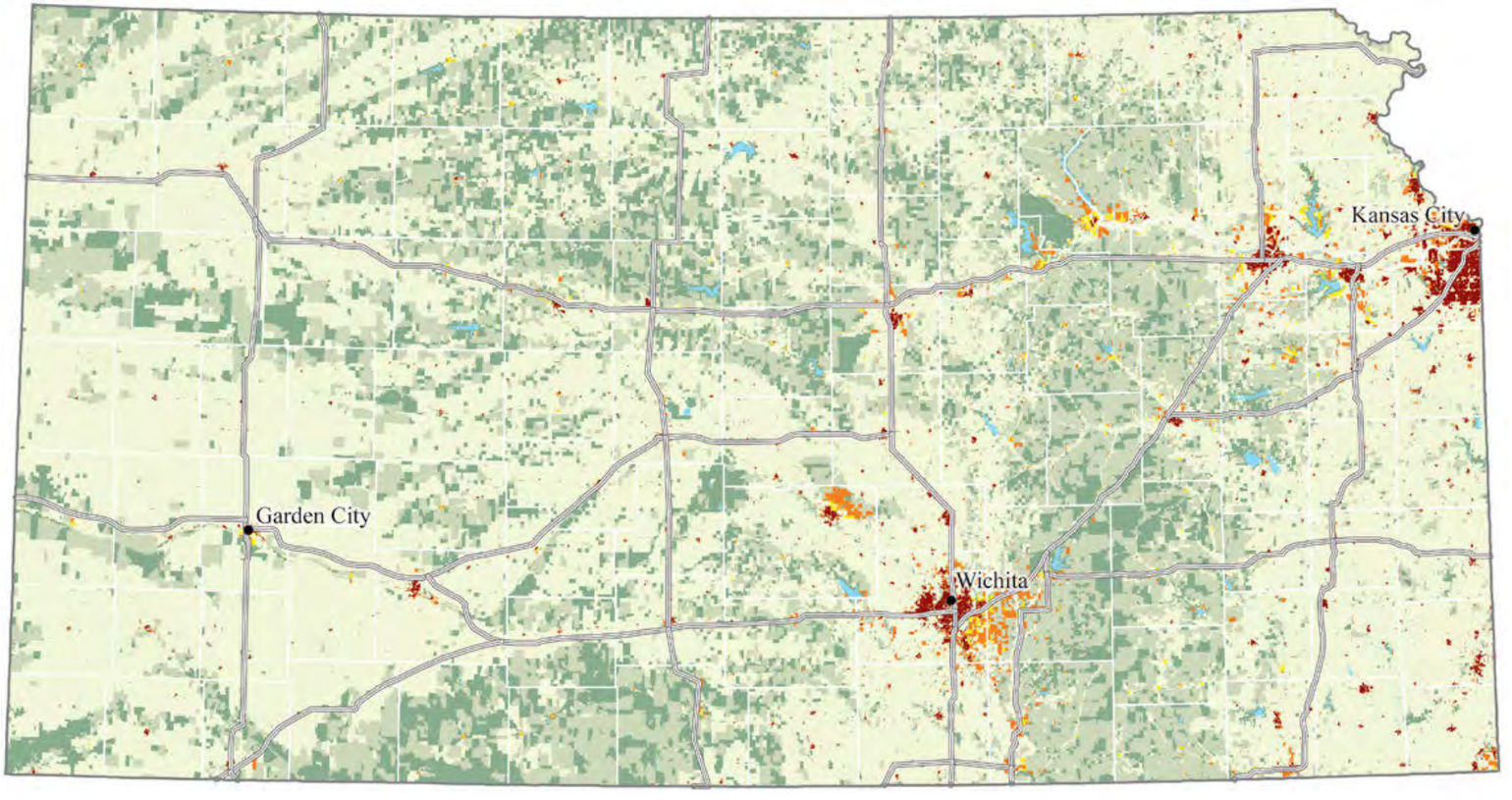
Wildland Vegetation Cover
(per Census block, %)

- 75-100
- 50-74
- 25-49
- 0-24



Kansas

Rocky Mountain Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

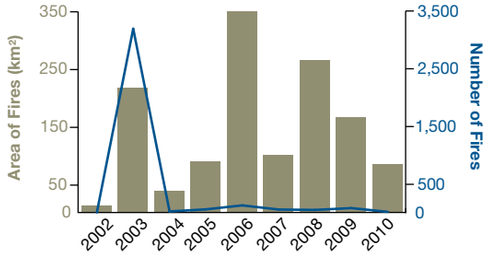
Population and Geography Overview

Census Data	Number	%
Population	2,853,118	
Housing units	1,233,215	
Seasonal use	12,763	1

Land Ownership	Area (km²)	%
Public-Federal	3,139	1
Public-State	723	0
Public-Local	10	0
Private	209,228	98

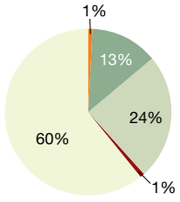
Land Cover	Area (km²)	%
Forest	7,854	4
Shrubland/herbaceous	78,941	37
Planted/cultivated	111,194	52
Developed	10,985	5
Water/wetland	3,982	2
Others	144	0
Total area	213,100	

Wildfire History

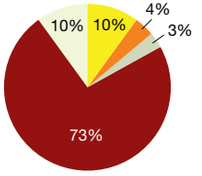


WUI in Numbers (see legend)

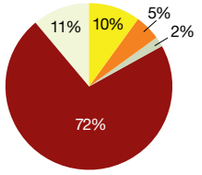
Area

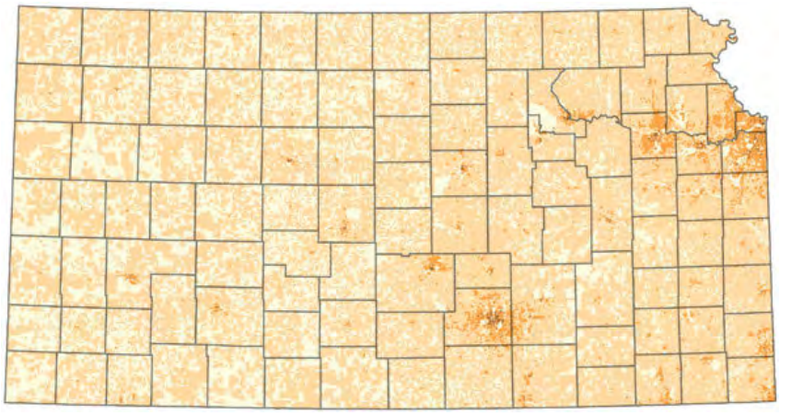


Housing Units



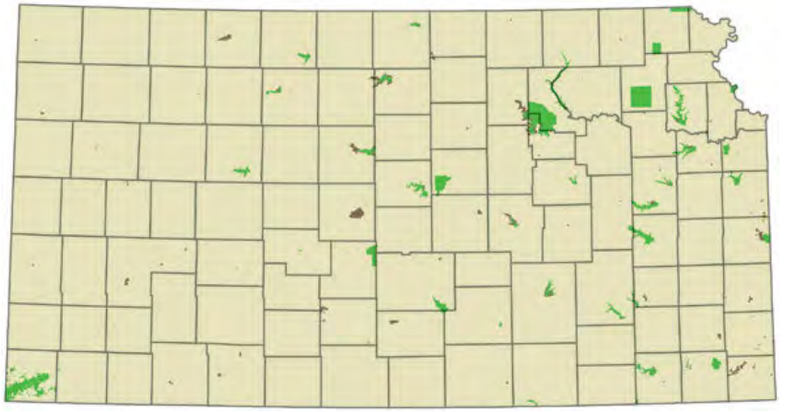
Population





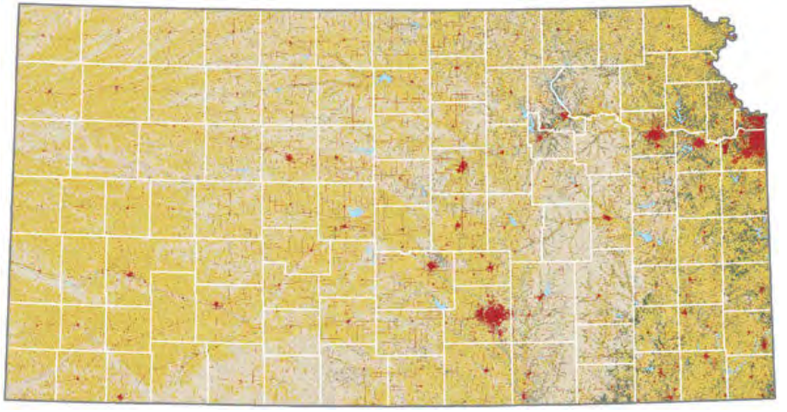
Housing Density
(houses per km^2)

- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



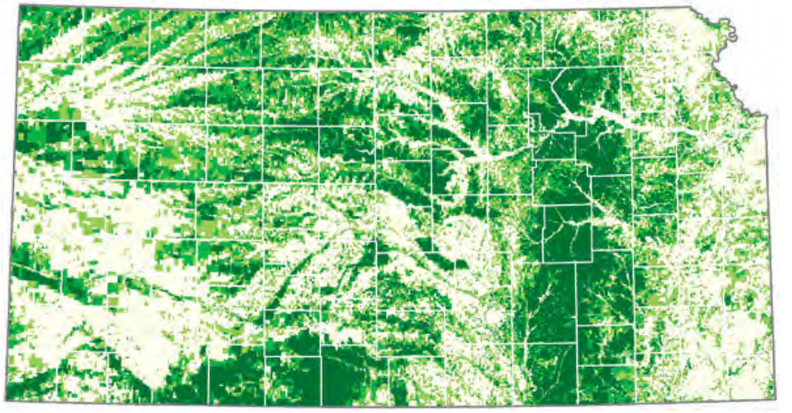
Land Ownership

- Public-Federal
- Public-State
- Public-Local
- Private



Land Cover

- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others

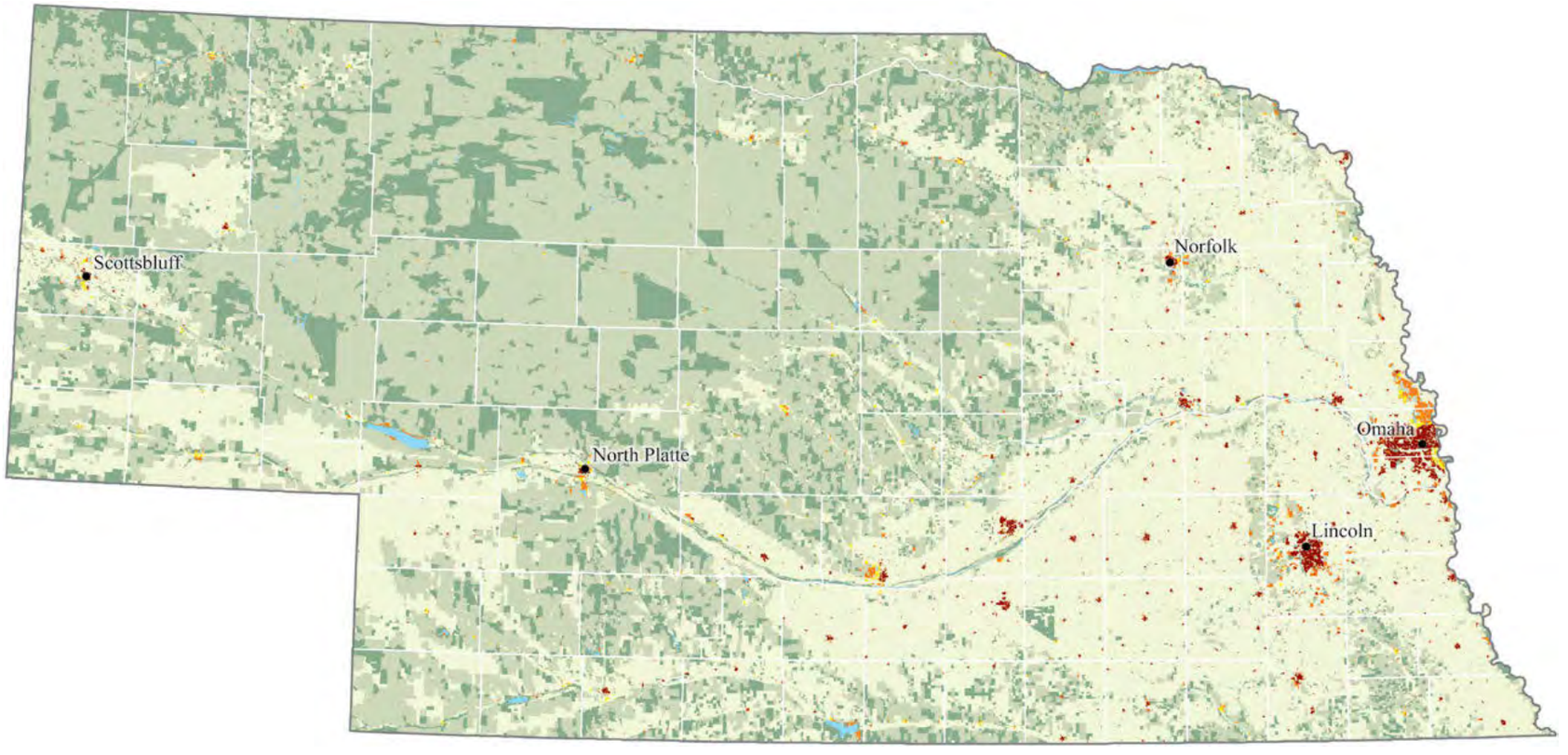


Wildland Vegetation Cover
(per Census block, %)

- 75-100
- 50-74
- 25-49
- 0-24

Nebraska

Rocky Mountain Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

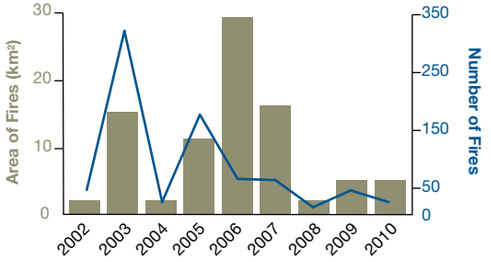
Population and Geography Overview

Census Data	Number	%
Population	1,826,341	
Housing units	796,793	
Seasonal use	13,881	2

Land Ownership	Area (km²)	%
Public-Federal	2,662	1
Public-State	1,055	1
Public-Local	631	0
Private	195,981	98

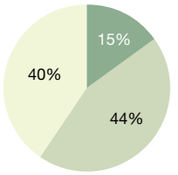
Land Cover	Area (km²)	%
Forest	3,990	2
Shrubland/herbaceous	108,136	54
Planted/cultivated	74,102	37
Developed	7,216	4
Water/wetland	6,741	3
Others	144	0
Total area	200,329	

Wildfire History

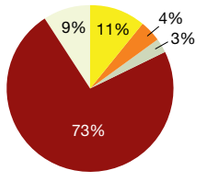


WUI in Numbers (see legend)

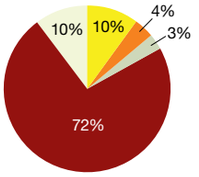
Area

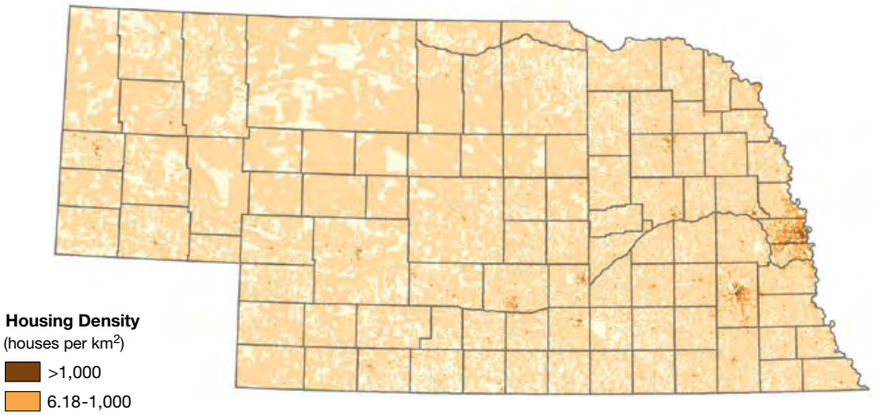


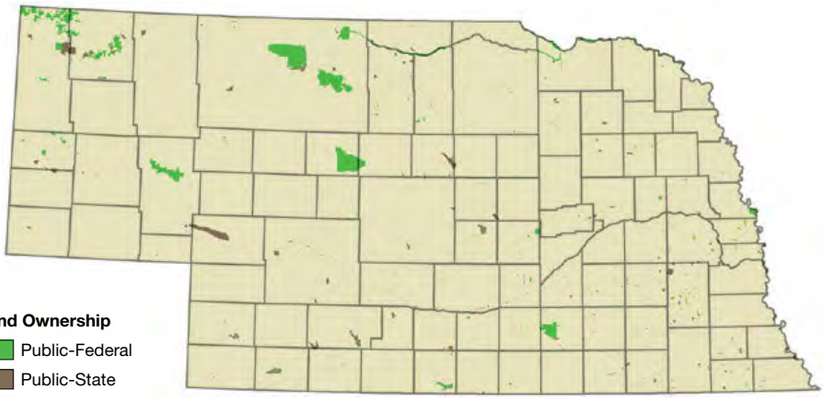
Housing Units

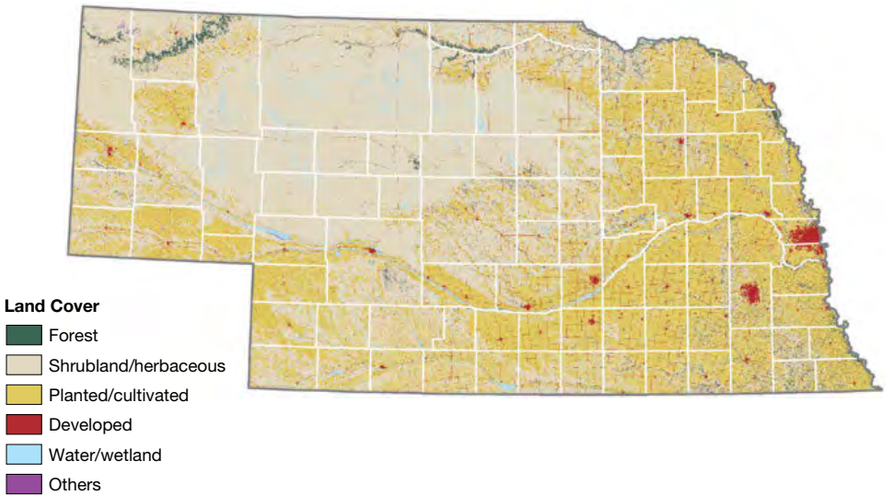


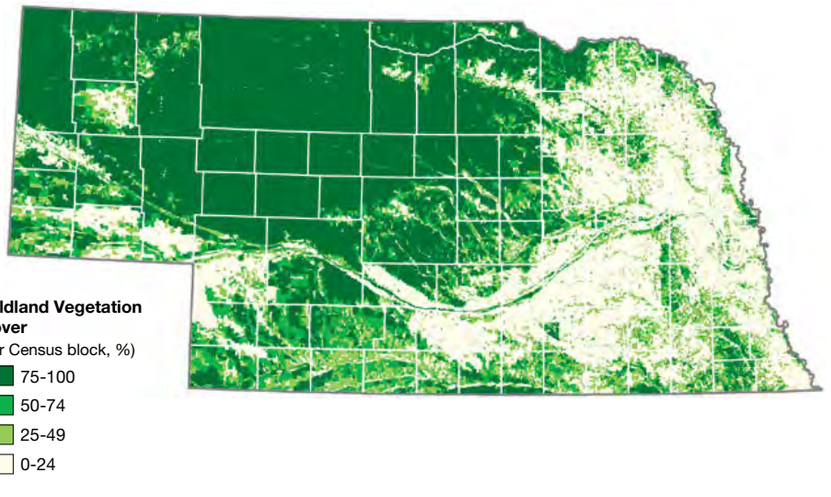
Population




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

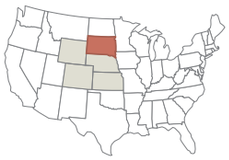

Land Ownership
Public-Federal
Public-State
Public-Local
Private

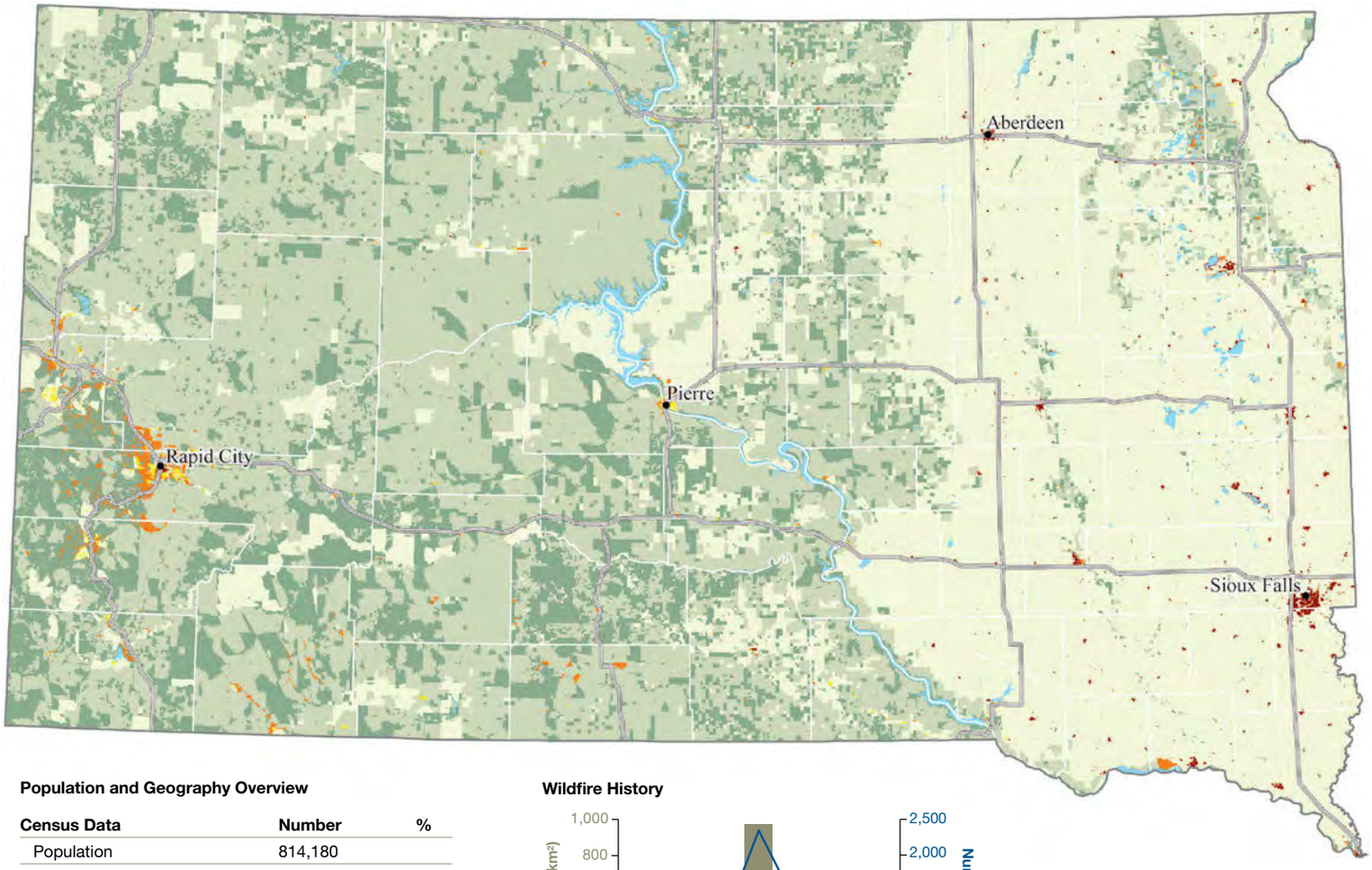

Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

South Dakota

Rocky Mountain Region





Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

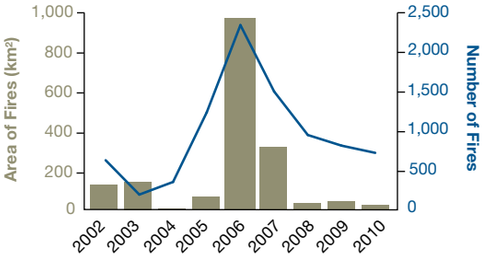
Population and Geography Overview

Census Data	Number	%
Population	814,180	
Housing units	363,438	
Seasonal use	13,277	4

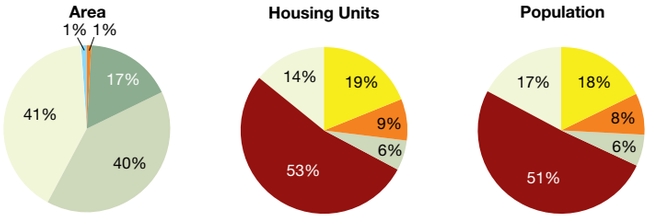
Land Ownership	Area (km²)	%
Public-Federal	14,110	7
Public-State	4,648	2
Public-Local	0	0
Private	180,971	91

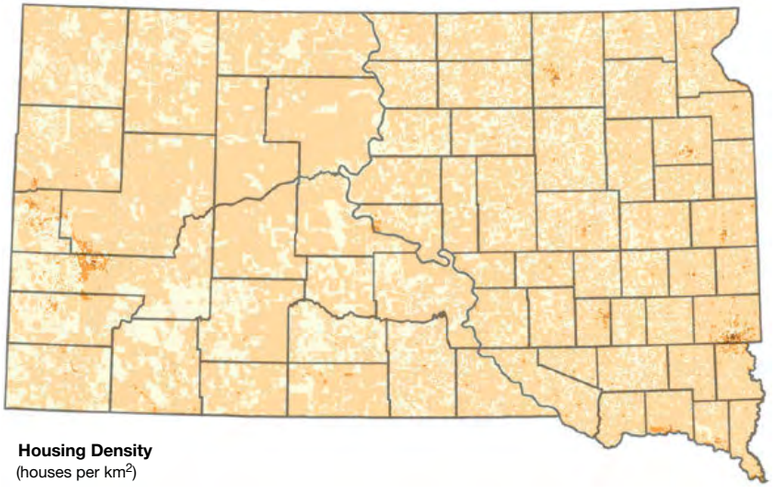
Land Cover	Area (km²)	%
Forest	6,866	3
Shrubland/herbaceous	104,013	52
Planted/cultivated	72,726	36
Developed	5,602	3
Water/wetland	8,785	4
Others	1,738	1
Total area	199,729	

Wildfire History



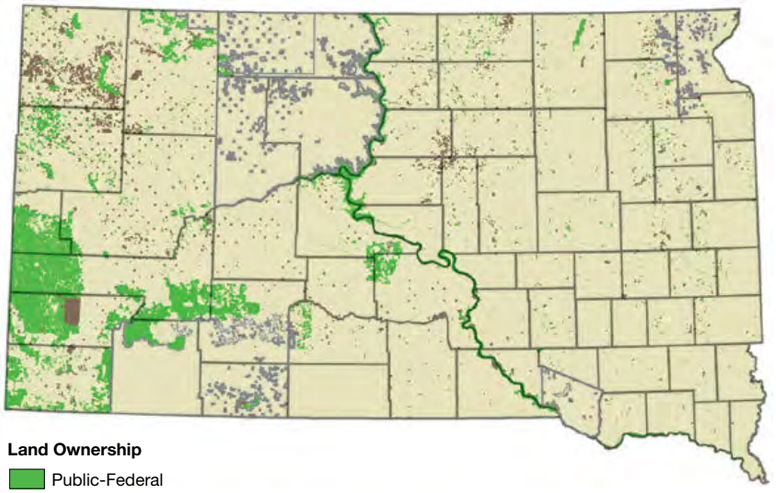
WUI in Numbers (see legend)





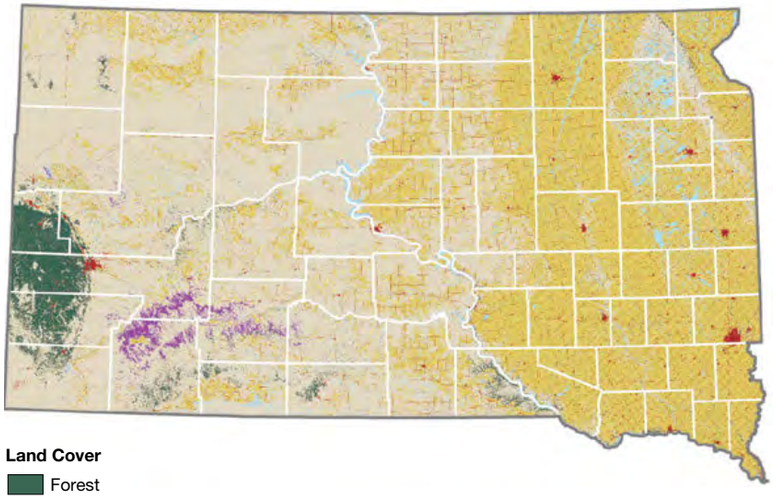
Housing Density
(houses per km^2)

- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



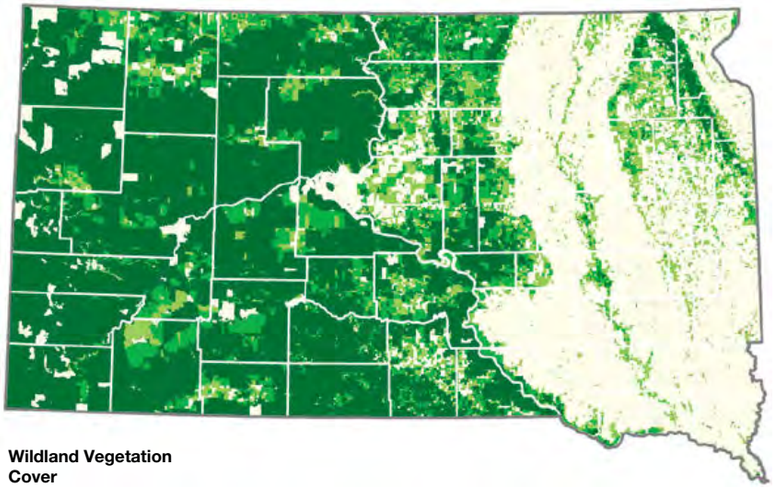
Land Ownership

- Public-Federal
- Public-State
- Public-Local
- Private



Land Cover

- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others

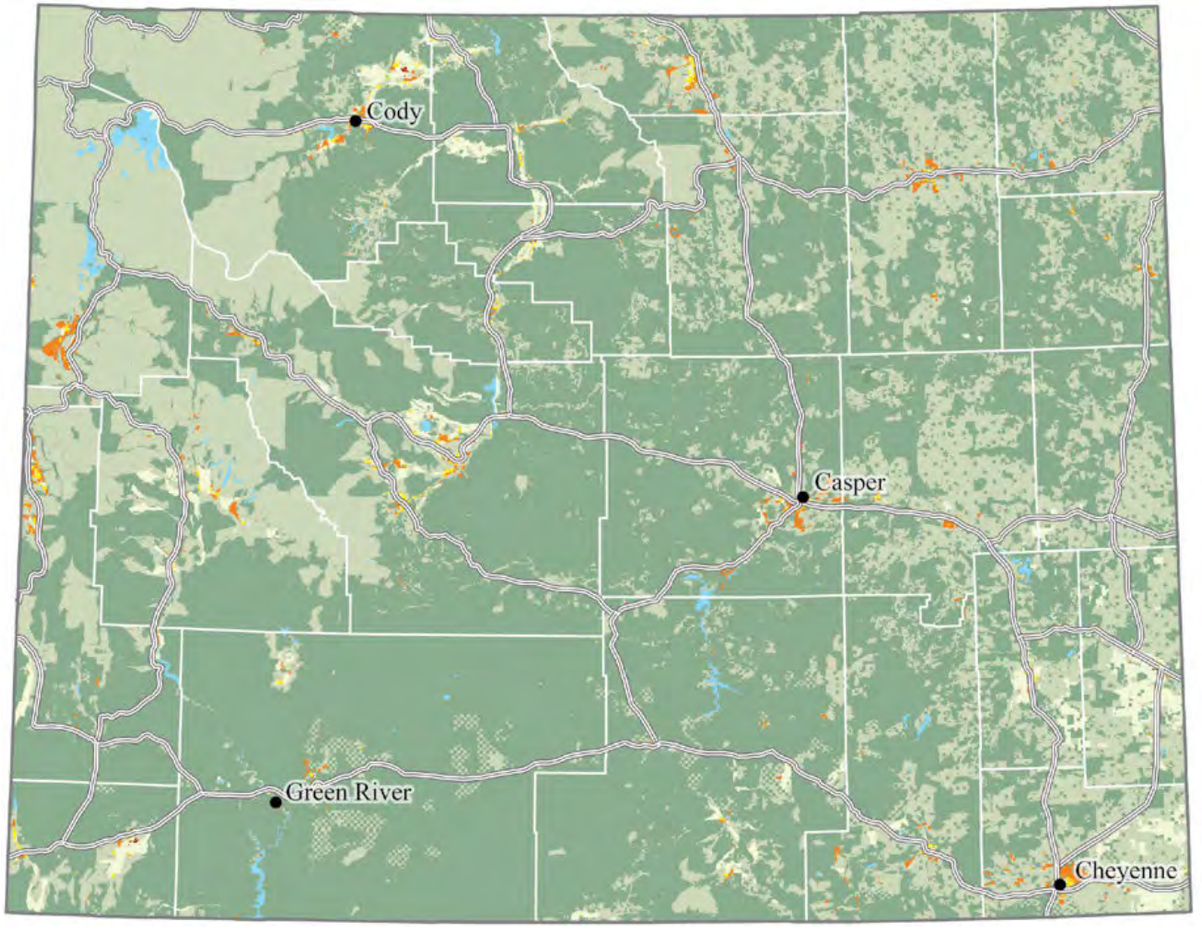


Wildland Vegetation Cover
(per Census block, %)

- 75-100
- 50-74
- 25-49
- 0-24

Wyoming

Rocky Mountain Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

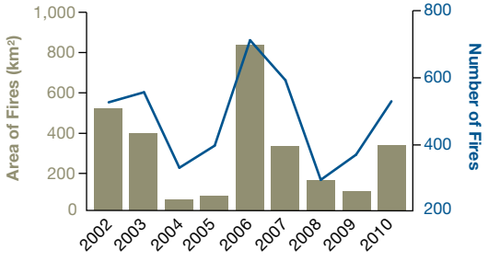
Population and Geography Overview

Census Data	Number	%
Population	563,626	
Housing units	261,868	
Seasonal use	14,892	6

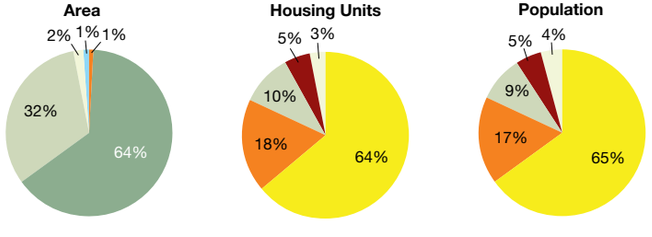
Land Ownership	Area (km²)	%
Public-Federal	124,621	49
Public-State	16,036	6
Public-Local	0	0
Private	112,677	44

Land Cover	Area (km²)	%
Forest	31,682	13
Shrubland/herbaceous	203,187	80
Planted/cultivated	7,600	3
Developed	2,163	1
Water/wetland	6,103	2
Others	2,599	1
Total area	253,344	

Wildfire History

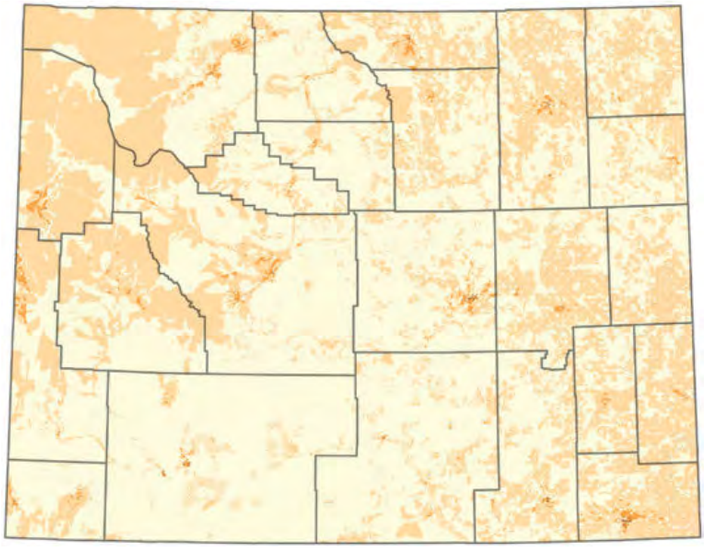


WUI in Numbers (see legend)



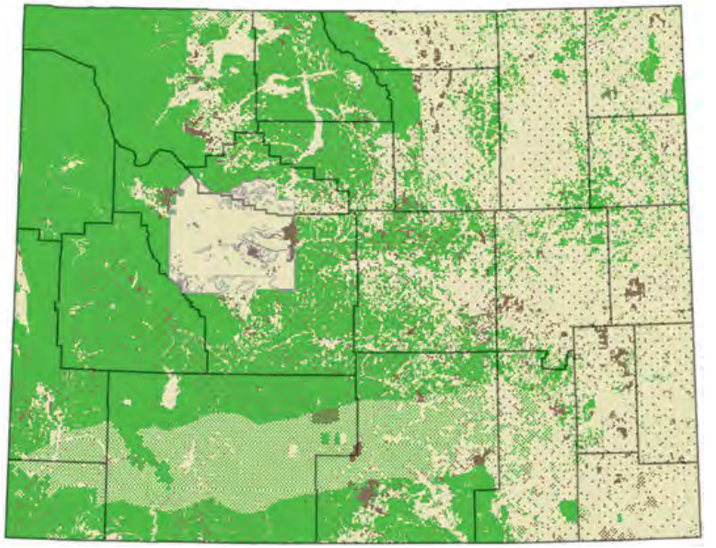
Housing Density
(houses per km^2)

- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



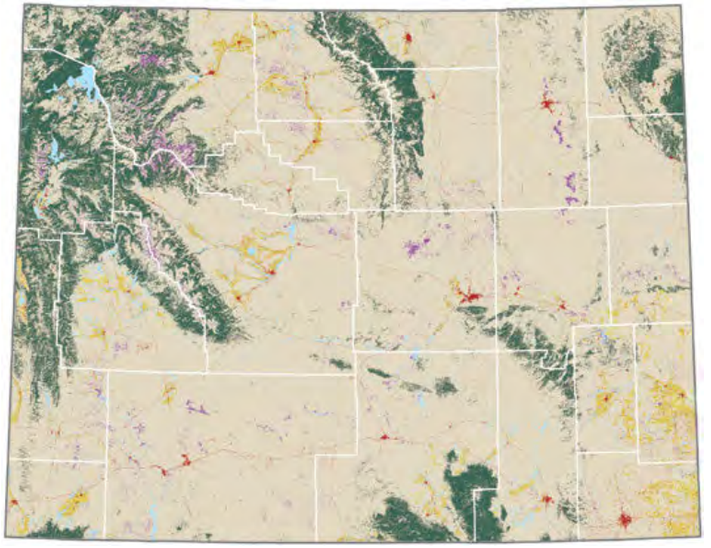
Land Ownership

- Public-Federal
- Public-State
- Public-Local
- Private



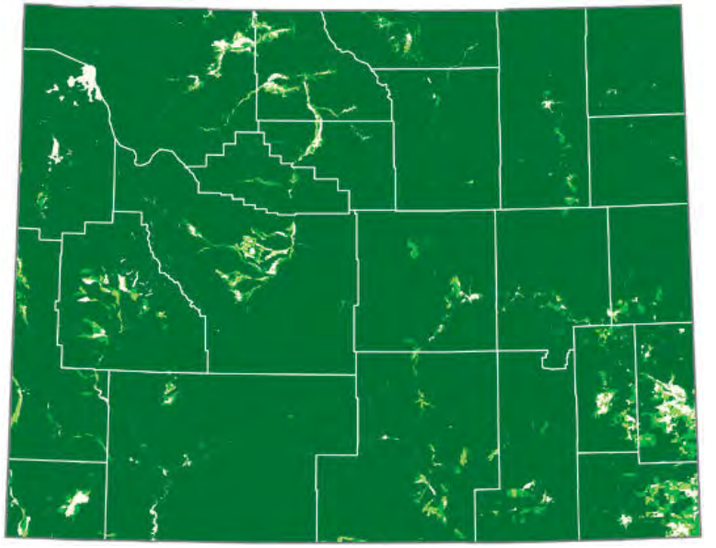
Land Cover

- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



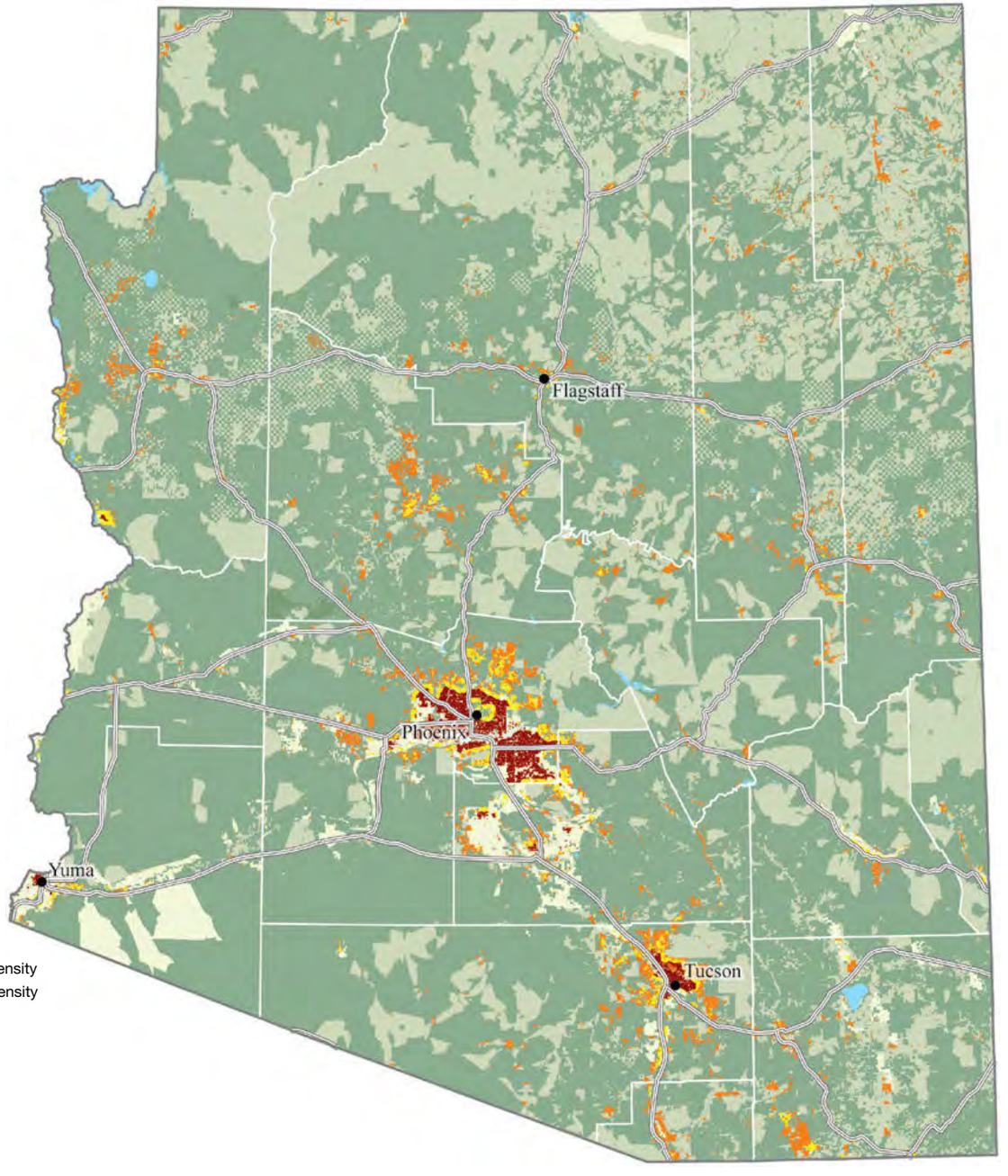
Wildland Vegetation Cover
(per Census block, %)

- 75-100
- 50-74
- 25-49
- 0-24



Arizona

Southwestern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

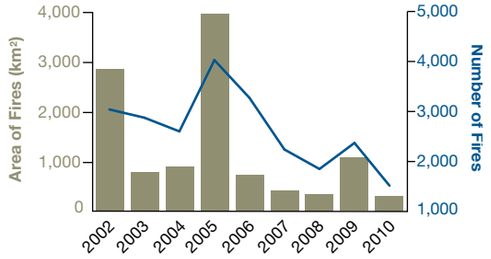
Population and Geography Overview

Census Data	Number	%
Population	6,392,017	
Housing units	2,844,526	
Seasonal use	184,327	6

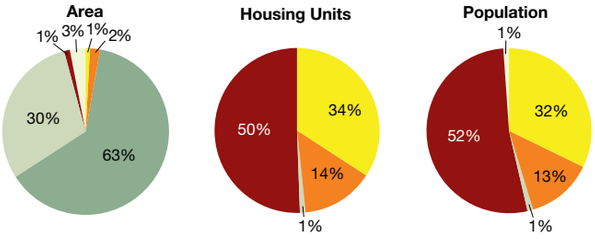
Land Ownership	Area (km²)	%
Public-Federal	121,653	41
Public-State	37,749	13
Public-Local	863	0
Private	134,968	46

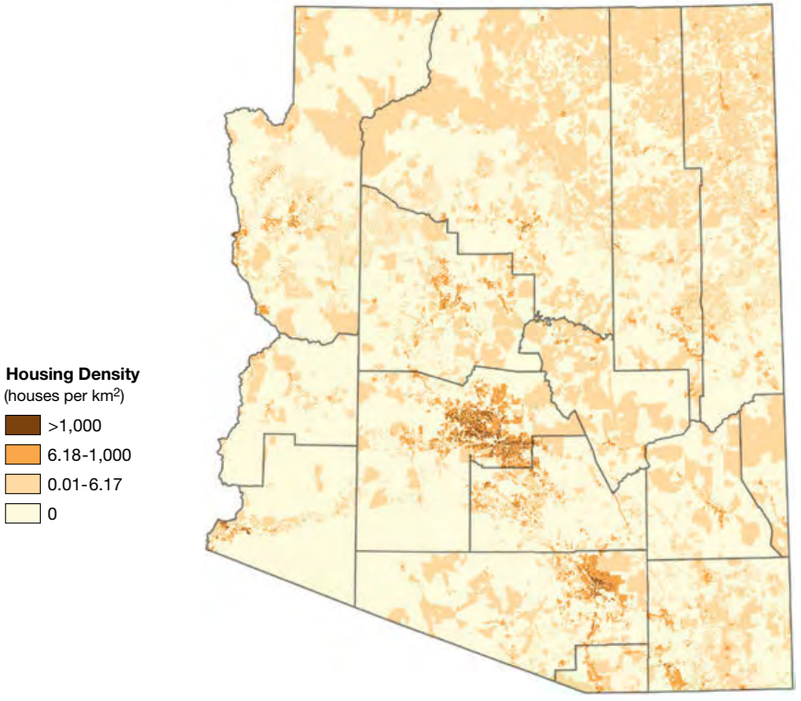
Land Cover	Area (km²)	%
Forest	44,271	15
Shrubland/herbaceous	230,220	78
Planted/cultivated	5,220	2
Developed	6,612	2
Water/wetland	1,894	1
Others	7,015	2
Total area	295,234	

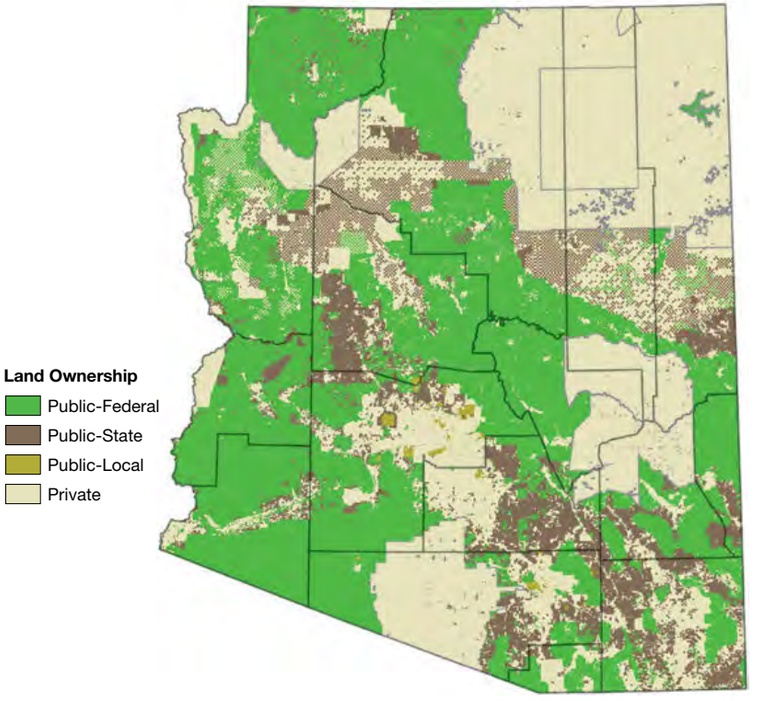
Wildfire History

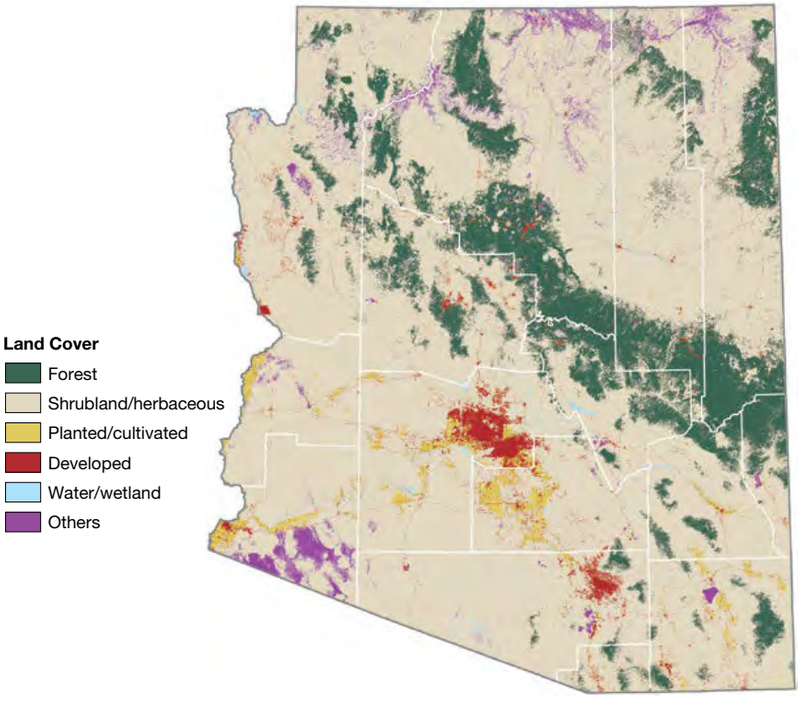


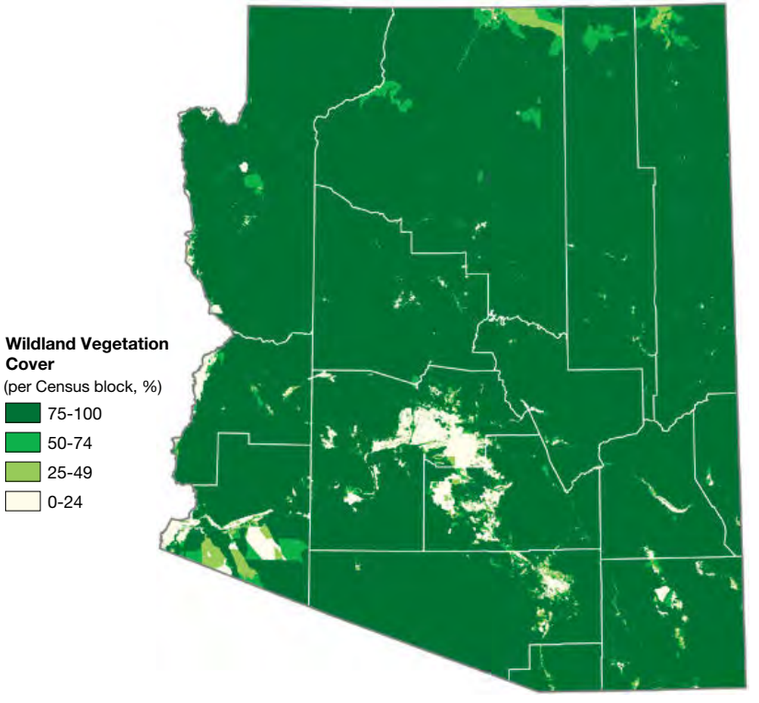
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

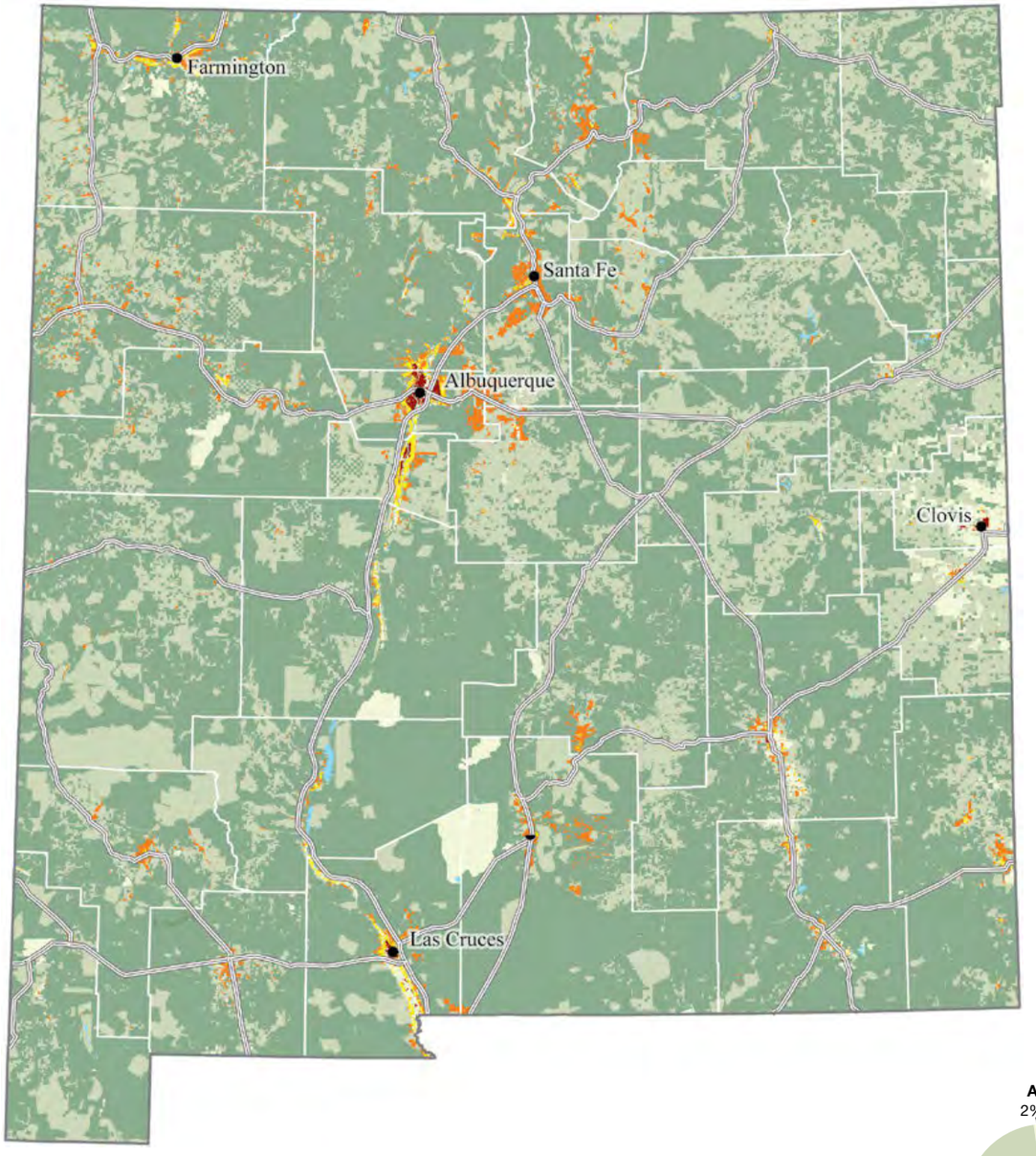

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

New Mexico

Southwestern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

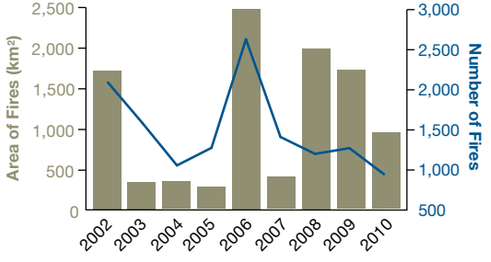
Population and Geography Overview

Census Data	Number	%
Population	2,059,179	
Housing units	901,388	
Seasonal use	36,612	4

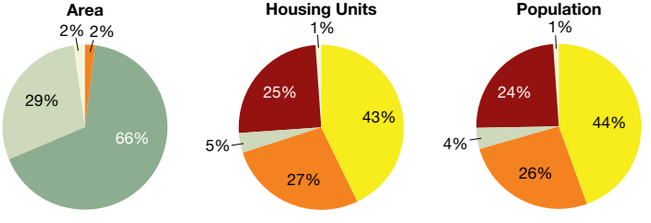
Land Ownership	Area (km²)	%
Public-Federal	106,390	34
Public-State	37,056	12
Public-Local	13	0
Private	171,459	54

Land Cover	Area (km²)	%
Forest	52,345	17
Shrubland/herbaceous	248,112	79
Planted/cultivated	5,659	2
Developed	3,730	1
Water/wetland	1,724	1
Others	3,348	1
Total area	314,918	

Wildfire History

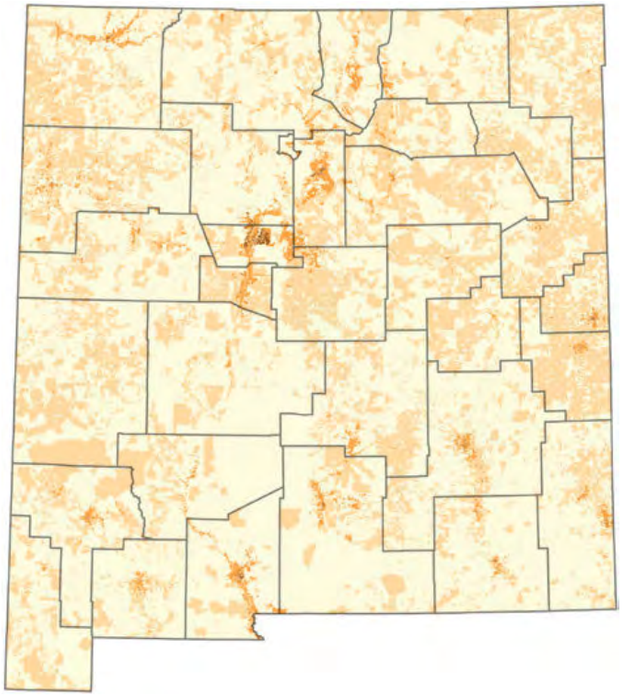


WUI in Numbers (see legend)



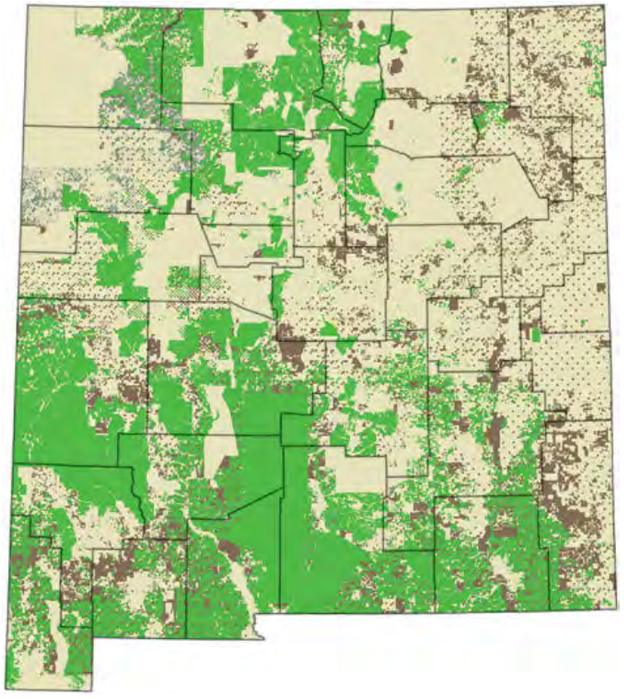
Housing Density
(houses per km^2)

- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



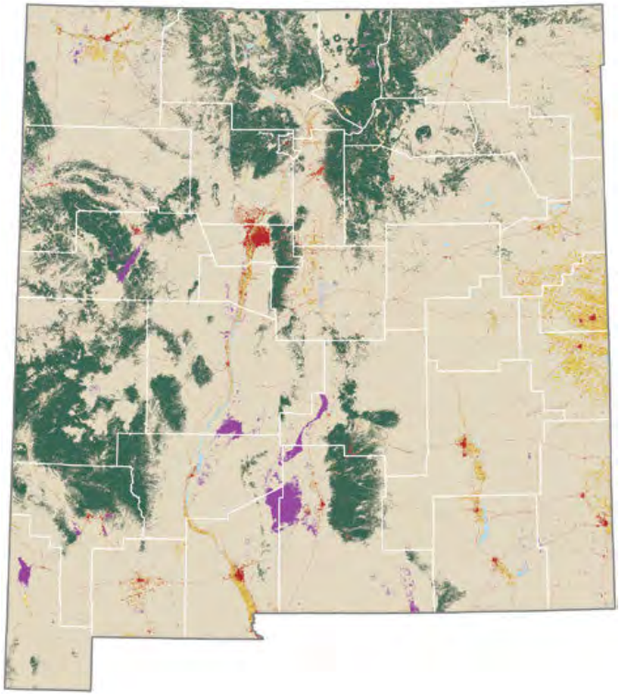
Land Ownership

- Public-Federal
- Public-State
- Public-Local
- Private



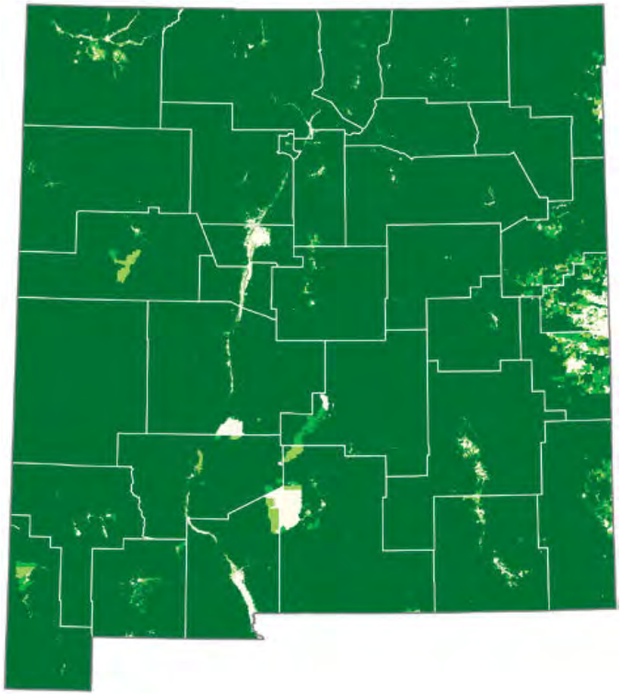
Land Cover

- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



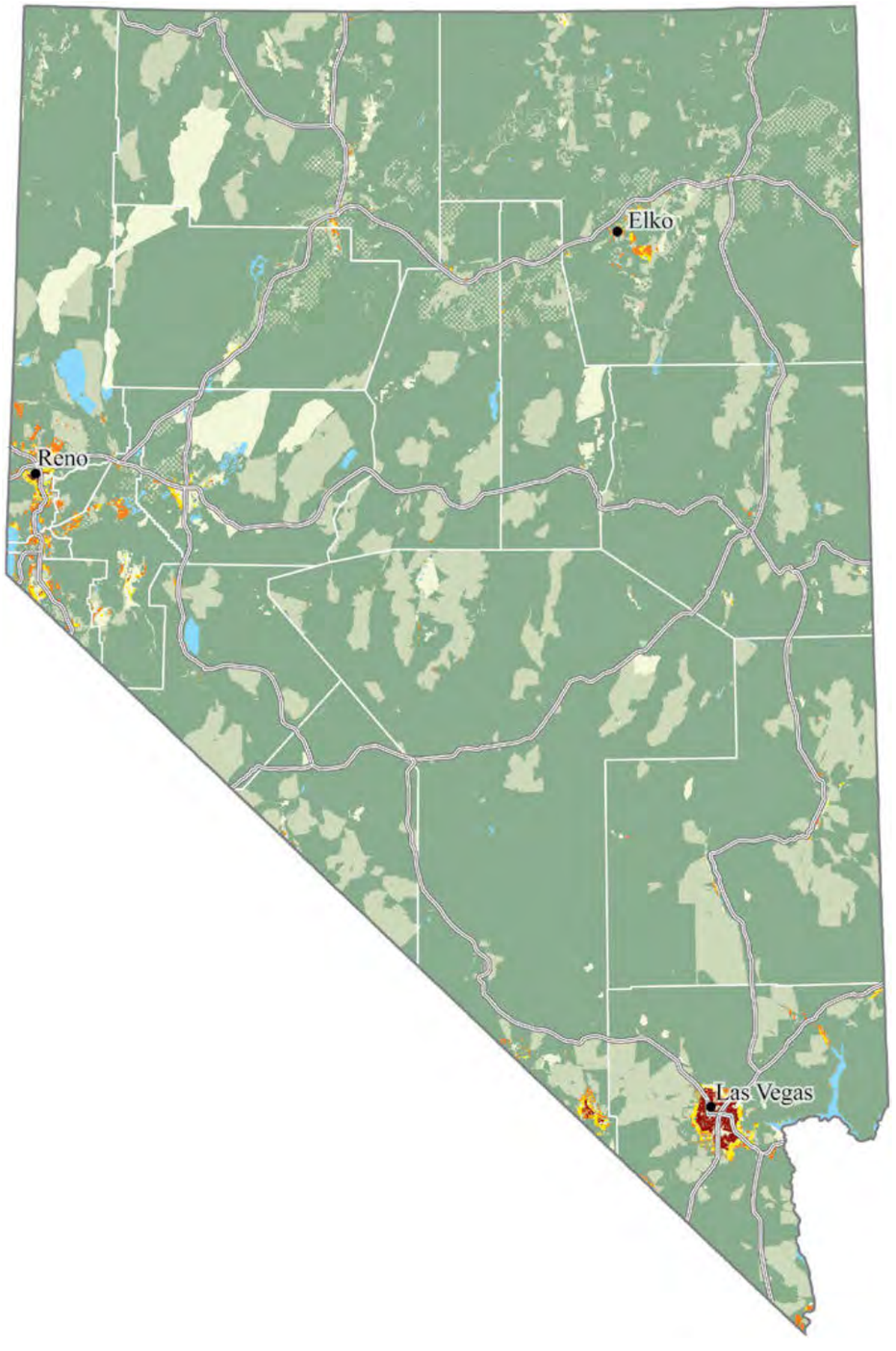
Wildland Vegetation Cover
(per Census block, %)

- 75-100
- 50-74
- 25-49
- 0-24



Nevada

Intermountain Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

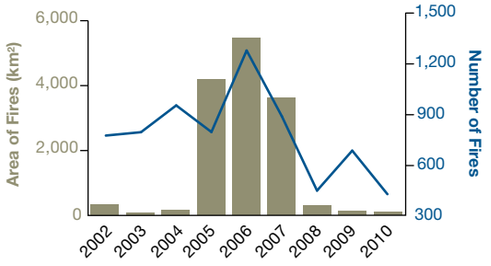
Population and Geography Overview

Census Data	Number	%
Population	2,700,551	
Housing units	1,173,814	
Seasonal use	32,703	3

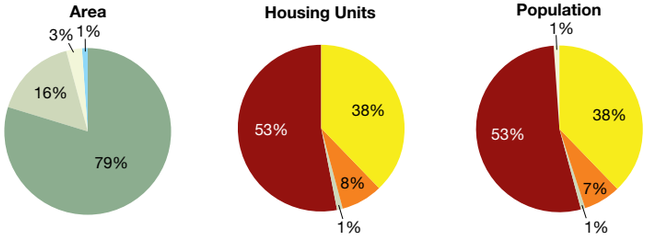
Land Ownership	Area (km²)	%
Public-Federal	242,964	85
Public-State	762	0
Public-Local	62	0
Private	42,592	15

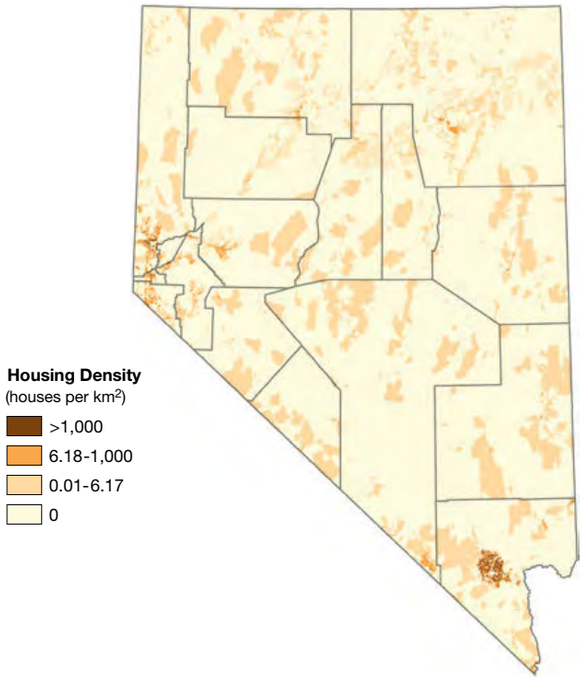
Land Cover	Area (km²)	%
Forest	31,159	11
Shrubland/herbaceous	237,374	83
Planted/cultivated	3,095	1
Developed	2,844	1
Water/wetland	3,188	1
Others	8,721	3
Total area	286,380	

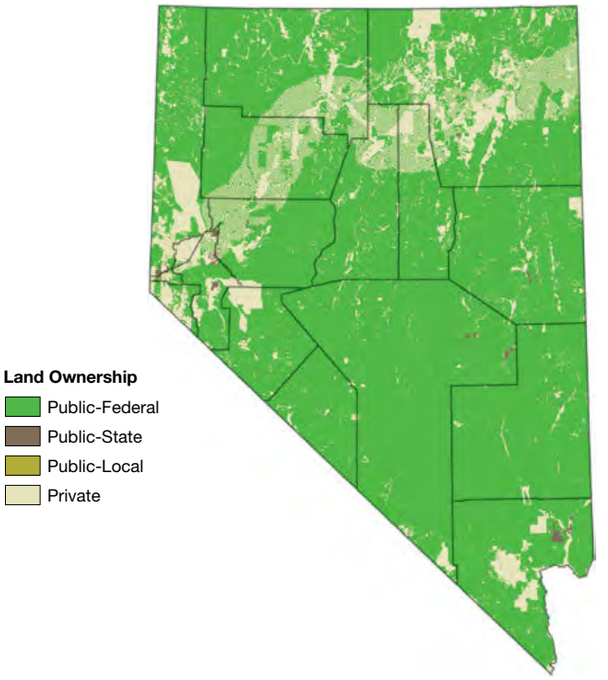
Wildfire History

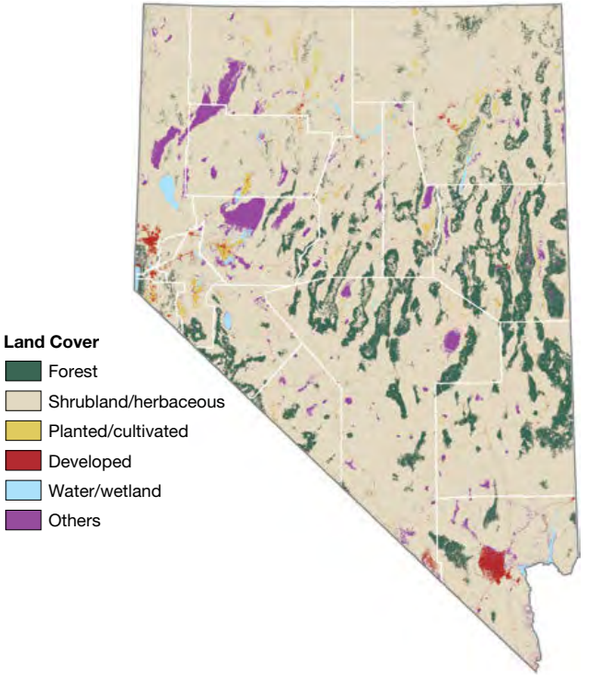


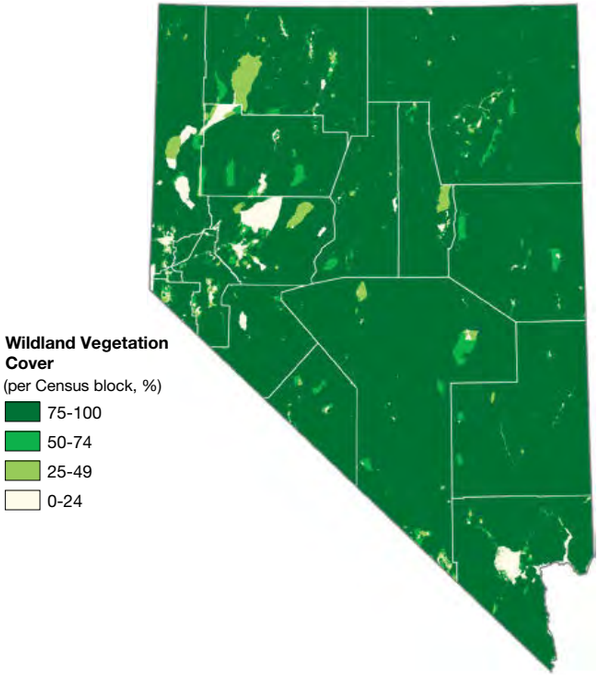
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

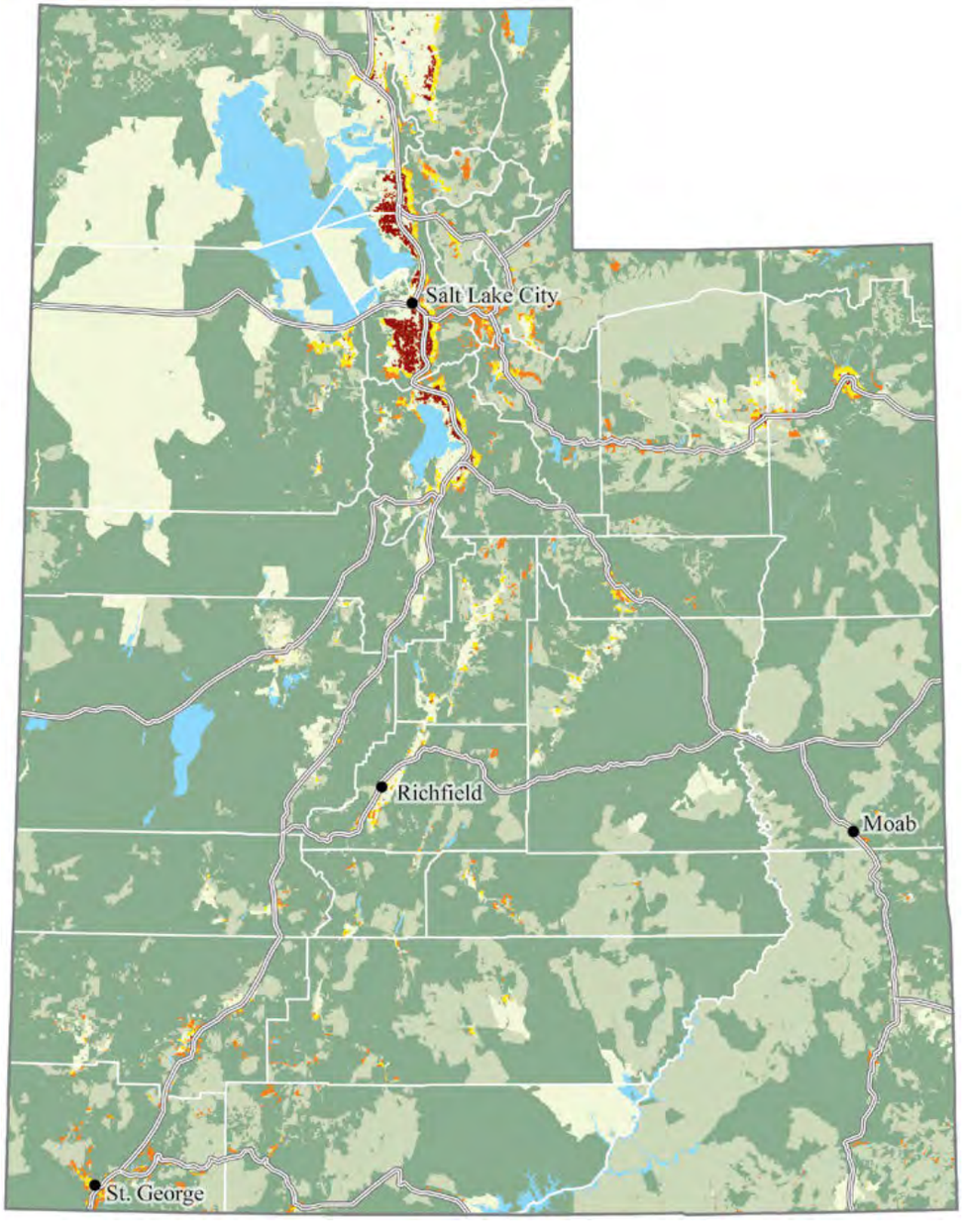

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Utah

Intermountain Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 75 150 km

For more information on the maps and data presented here, please refer to page 20.

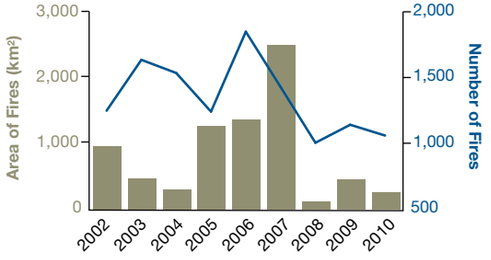
Population and Geography Overview

Census Data	Number	%
Population	2,763,885	
Housing units	979,709	
Seasonal use	47,978	5

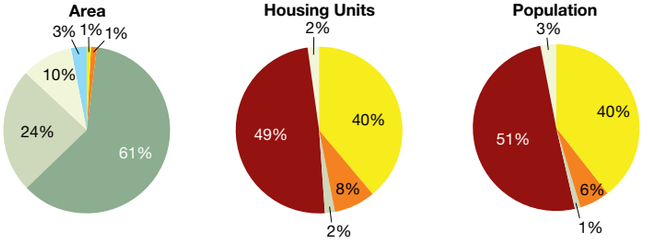
Land Ownership	Area (km²)	%
Public-Federal	141,315	64
Public-State	19,744	9
Public-Local	25	0
Private	58,800	27

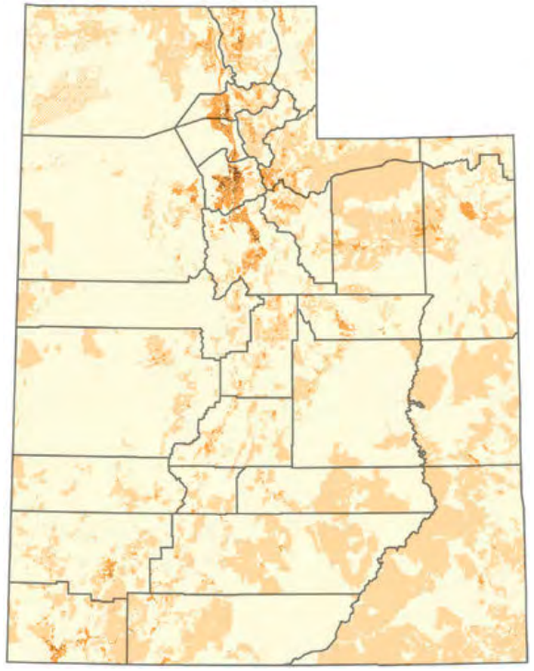
Land Cover	Area (km²)	%
Forest	54,624	25
Shrubland/herbaceous	122,955	56
Planted/cultivated	7,393	3
Developed	3,581	2
Water/wetland	7,094	3
Others	24,238	11
Total area	219,884	

Wildfire History

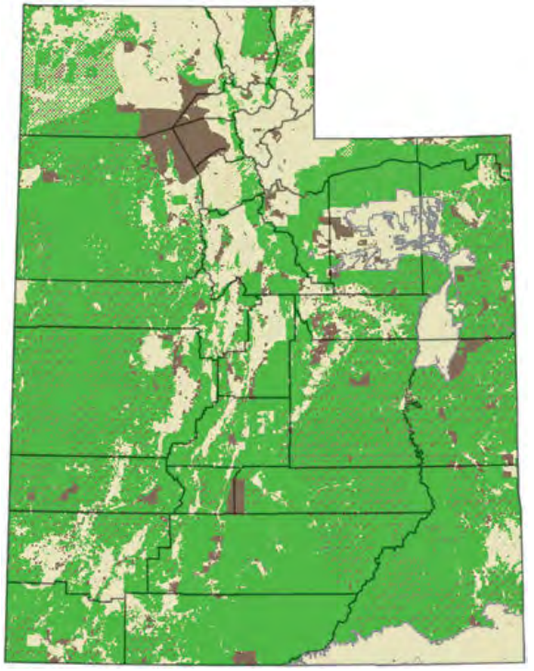


WUI in Numbers (see legend)

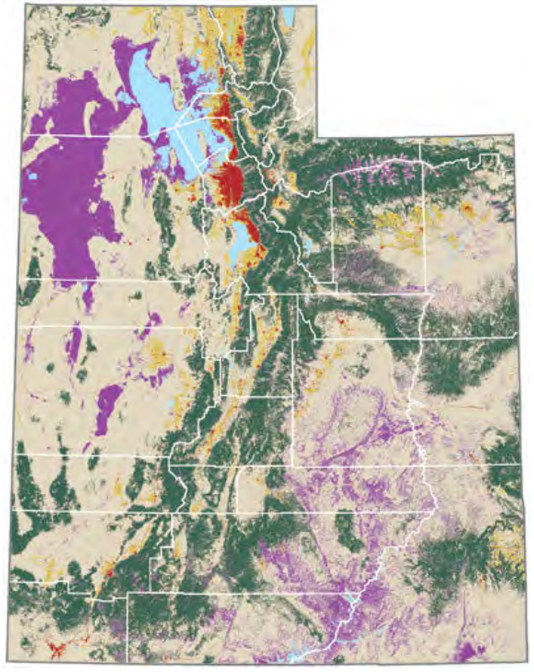




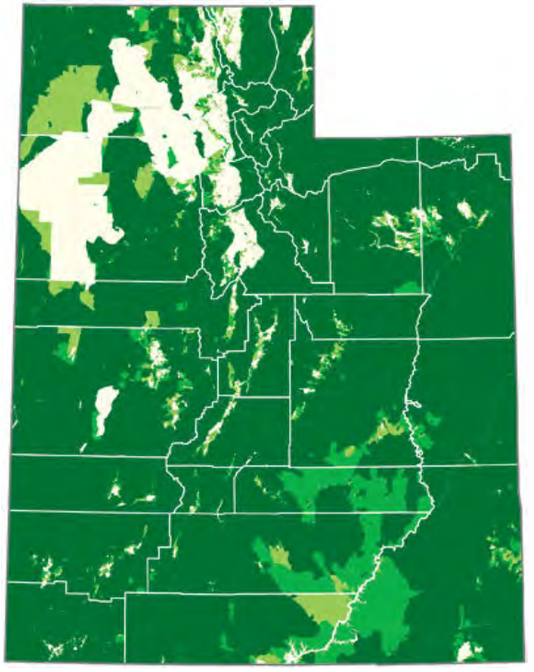
Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private



Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

California

Pacific Southwest Region

Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 100 200 km

For more information on the maps and data presented here, please refer to page 20.

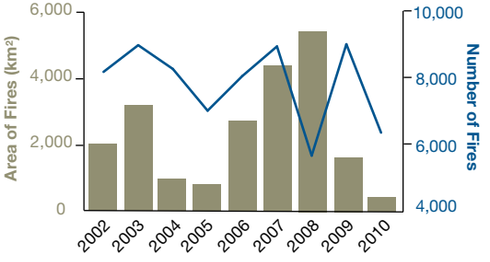
Population and Geography Overview

Census Data	Number	%
Population	37,253,956	
Housing units	13,680,081	
Seasonal use	302,815	2

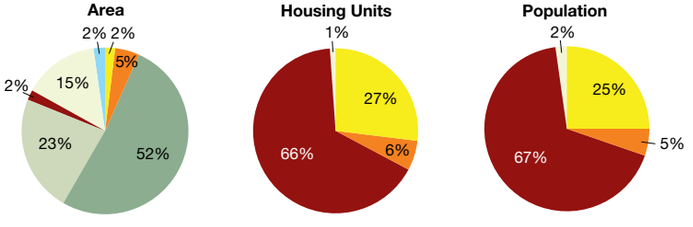
Land Ownership	Area (km²)	%
Public-Federal	198,970	48
Public-State	10,147	2
Public-Local	5,803	1
Private	195,902	48

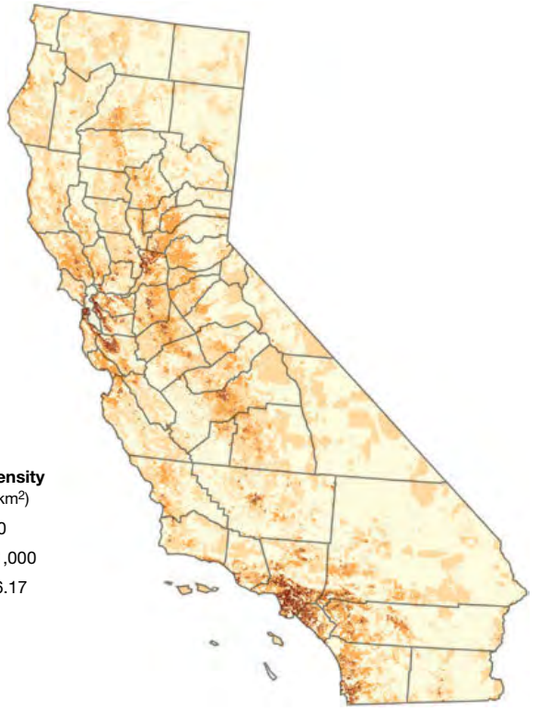
Land Cover	Area (km²)	%
Forest	96,349	23
Shrubland/herbaceous	216,461	53
Planted/cultivated	40,782	10
Developed	27,325	7
Water/wetland	9,580	2
Others	20,324	5
Total area	410,821	

Wildfire History



WUI in Numbers (see legend)





Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0

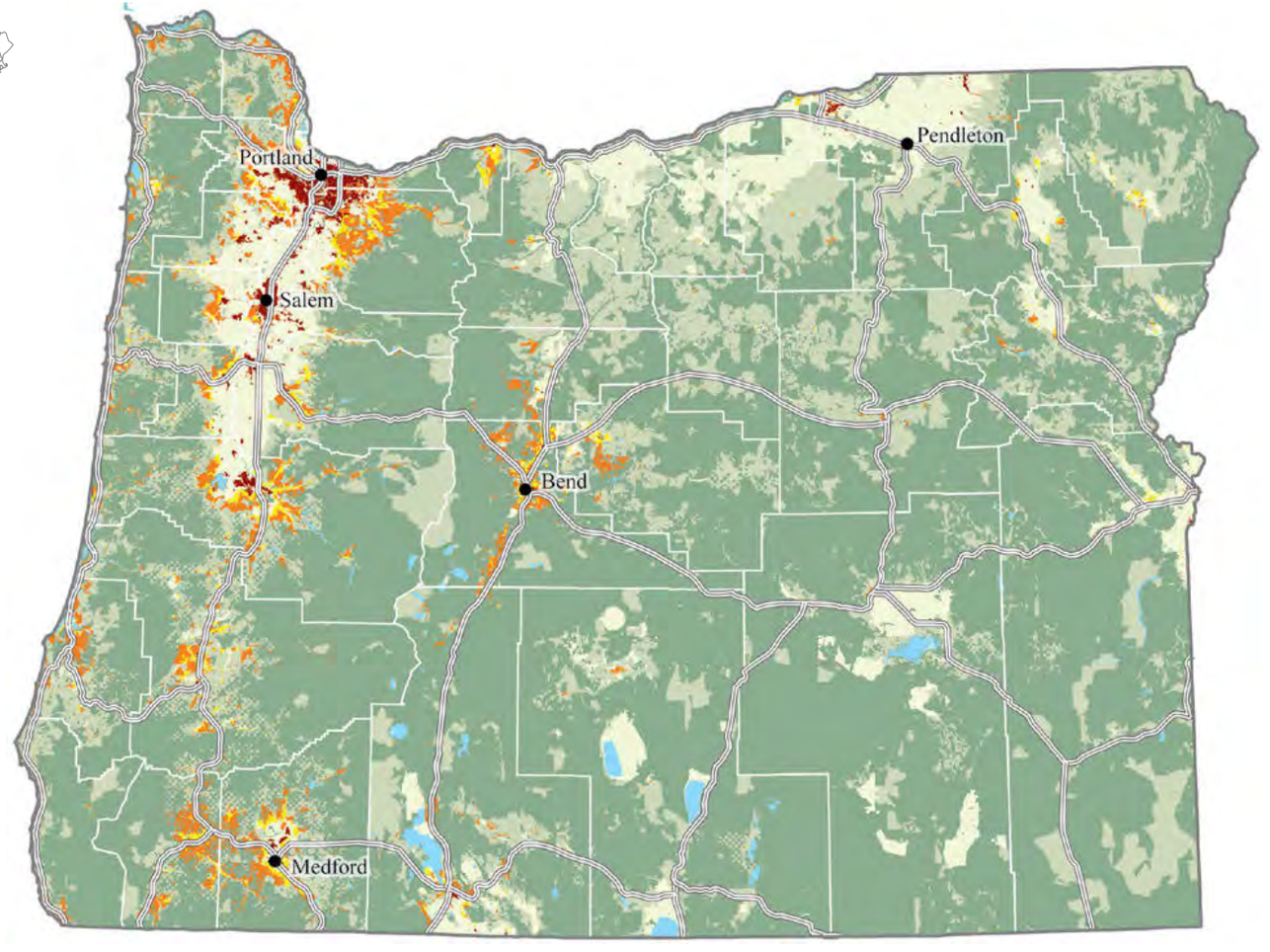
Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private

Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others

Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

Oregon

Pacific Northwest Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 100 200 km

For more information on the maps and data presented here, please refer to page 20.

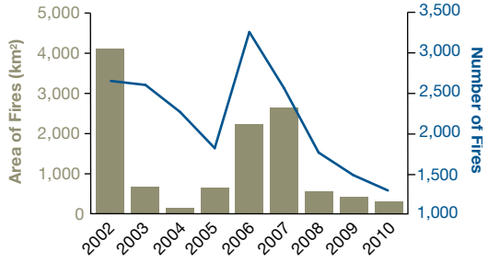
Population and Geography Overview

Census Data	Number	%
Population	3,831,074	
Housing units	1,675,562	
Seasonal use	55,473	3

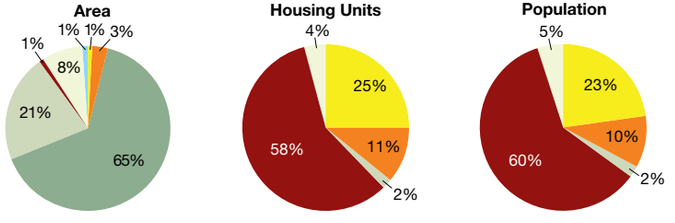
Land Ownership	Area (km²)	%
Public-Federal	132,294	53
Public-State	6,490	3
Public-Local	50	0
Private	112,541	45

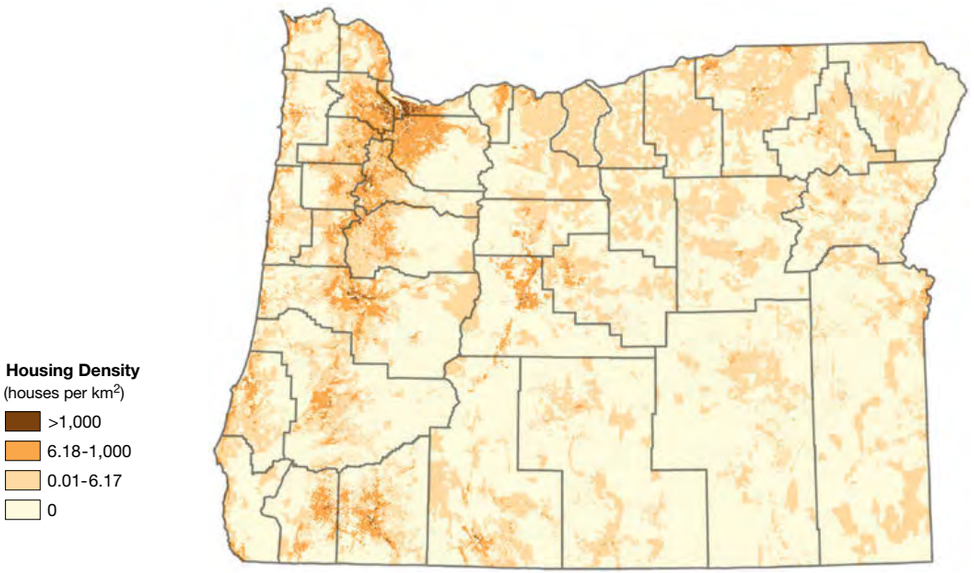
Land Cover	Area (km²)	%
Forest	90,924	36
Shrubland/herbaceous	124,809	50
Planted/cultivated	19,916	8
Developed	6,741	3
Water/wetland	5,779	2
Others	3,205	1
Total area	251,375	

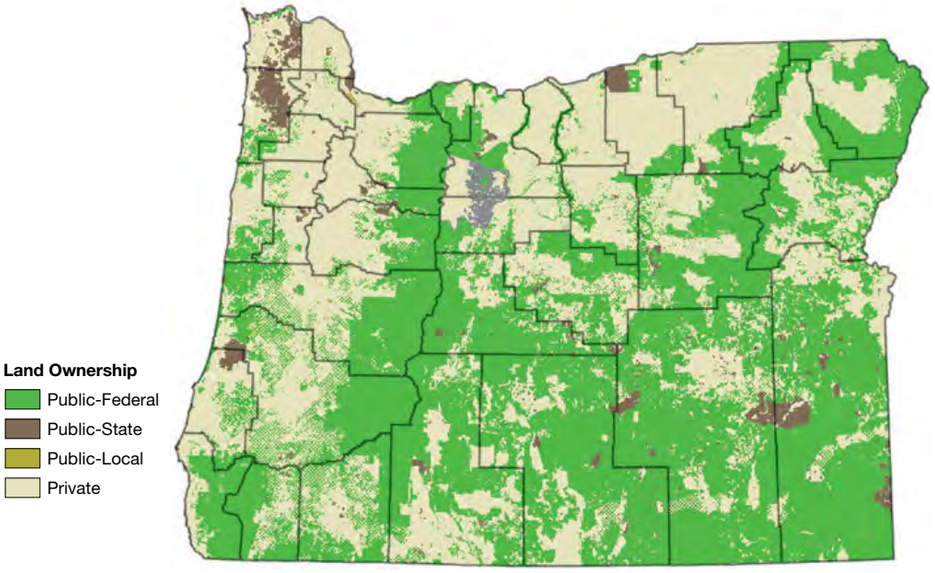
Wildfire History

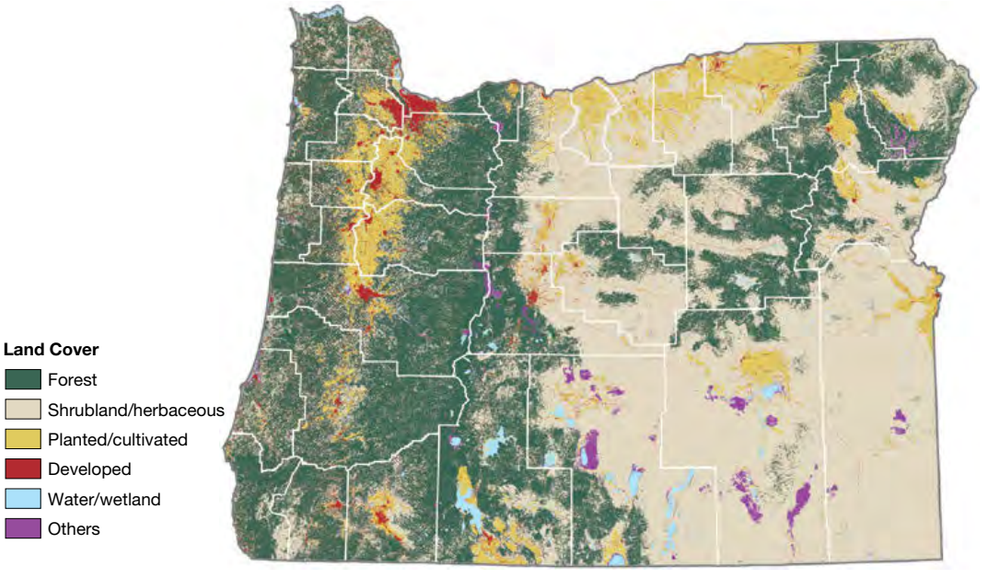


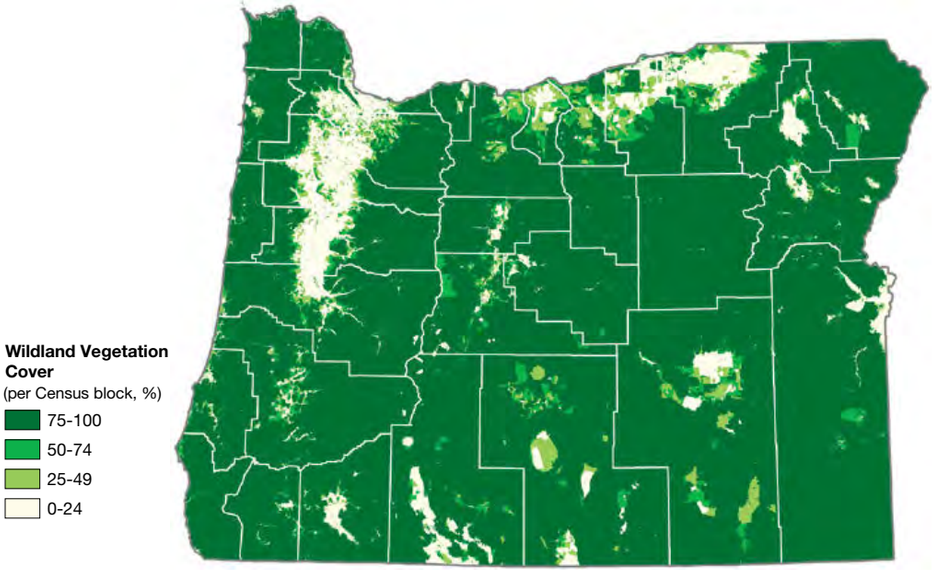
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0


Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Washington

Pacific Northwest Region

Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

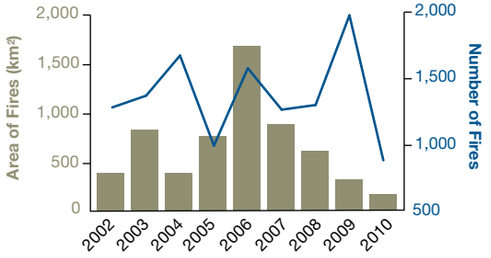
Population and Geography Overview

Census Data	Number	%
Population	6,724,540	
Housing units	2,885,677	
Seasonal use	89,907	3

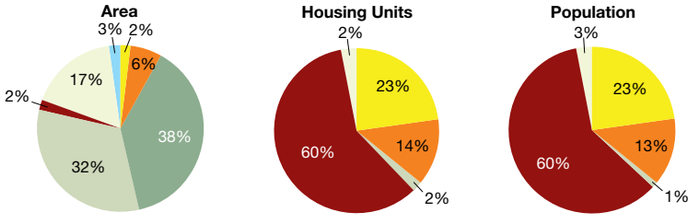
Land Ownership	Area (km²)	%
Public-Federal	52,674	30
Public-State	12,146	7
Public-Local	5	0
Private	111,738	63

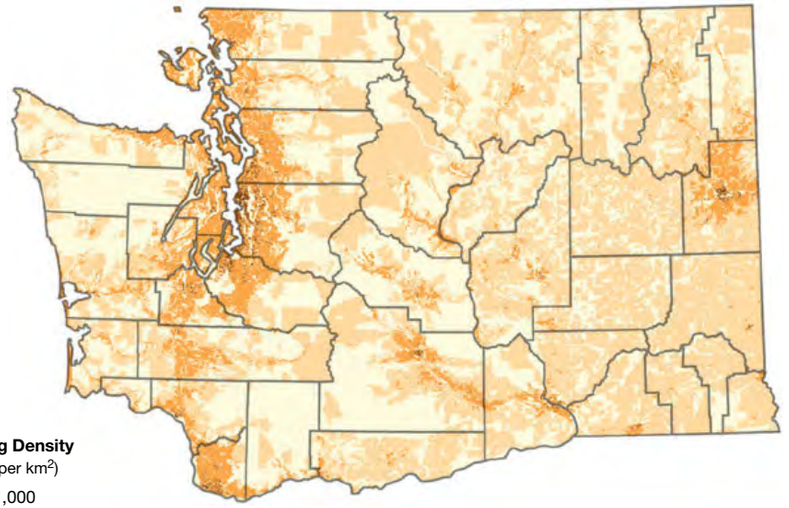
Land Cover	Area (km²)	%
Forest	72,116	41
Shrubland/herbaceous	54,409	31
Planted/cultivated	29,525	17
Developed	10,330	6
Water/wetland	7,414	4
Others	2,768	2
Total area	176,563	

Wildfire History

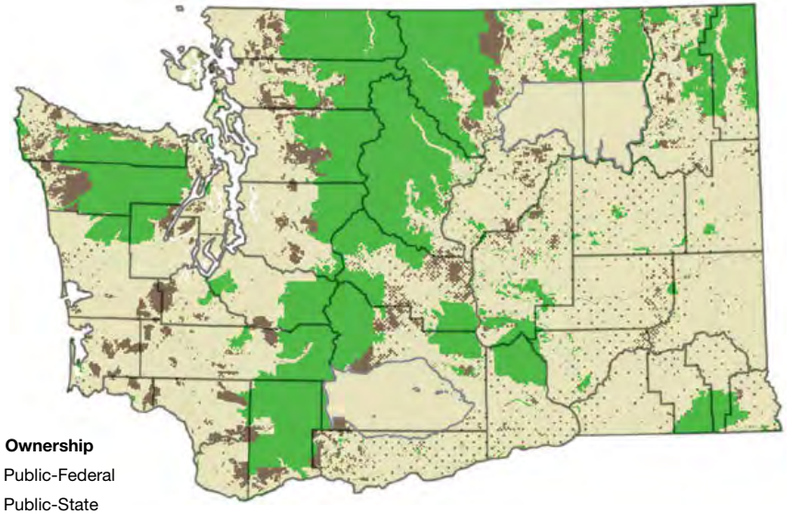


WUI in Numbers (see legend)

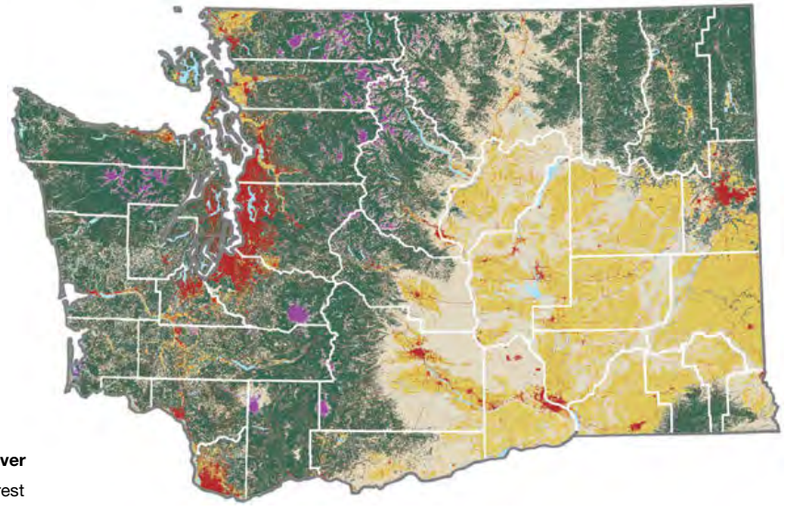




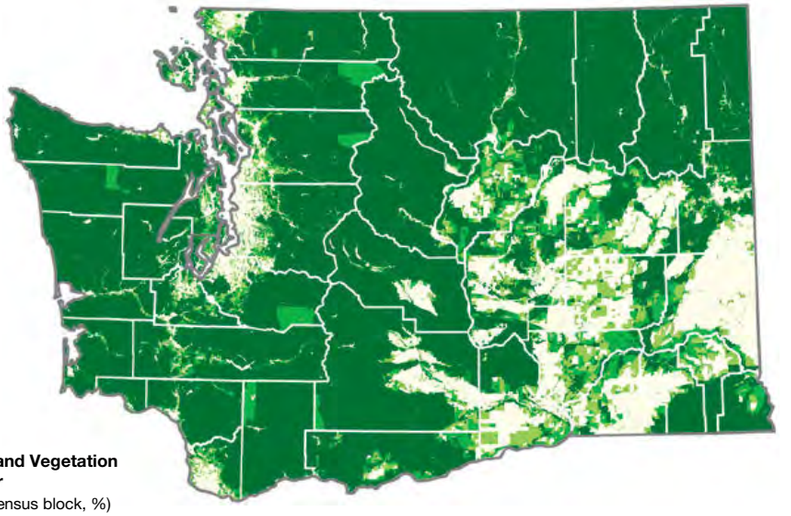
Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private



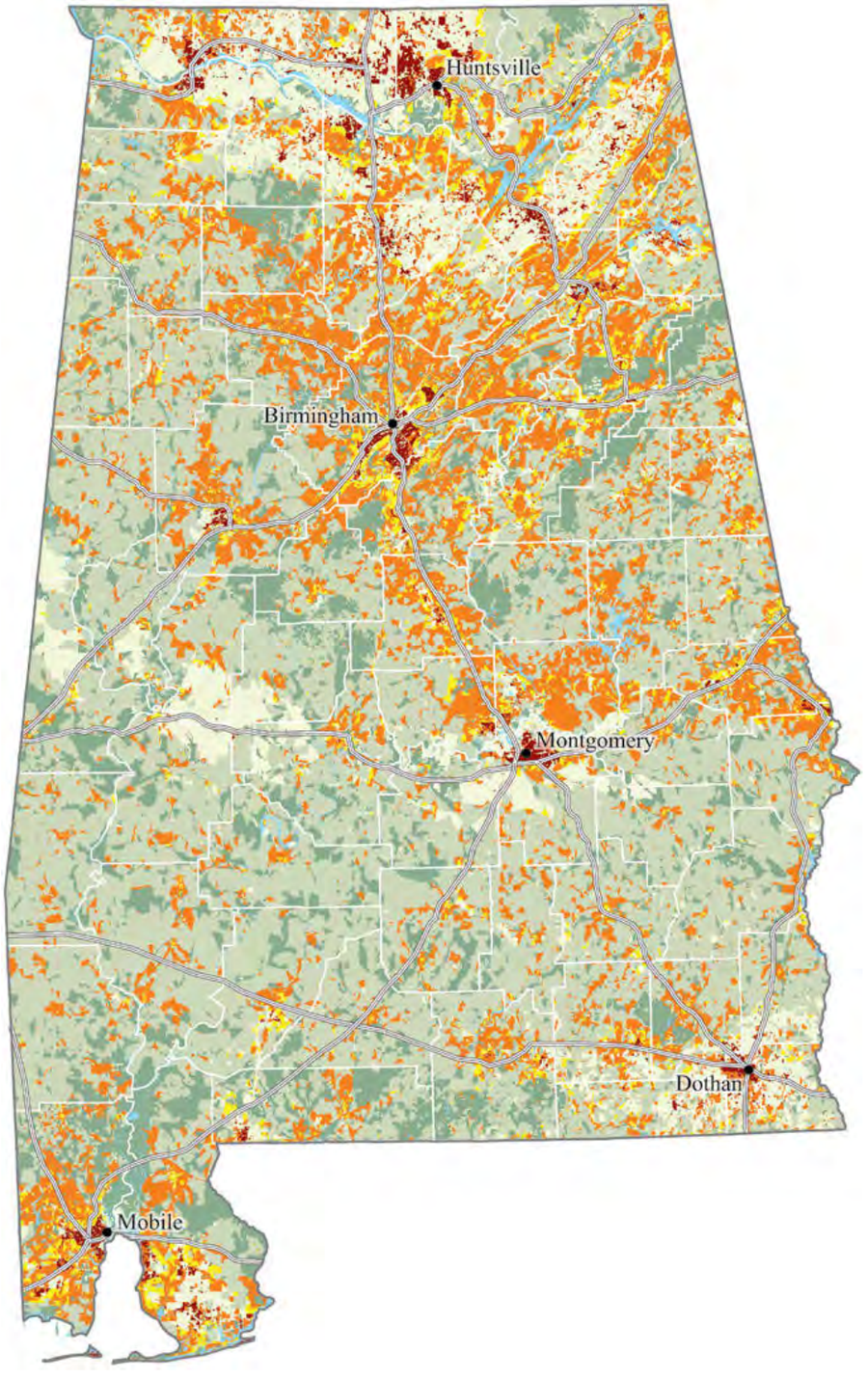
Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

Alabama

Southern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

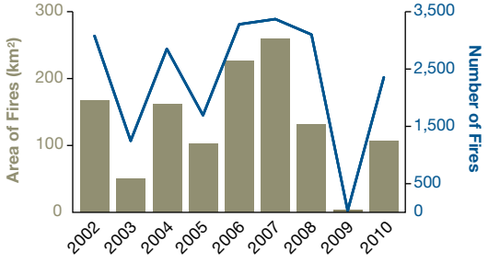
Population and Geography Overview

Census Data	Number	%
Population	4,779,736	
Housing units	2,171,853	
Seasonal use	63,890	3

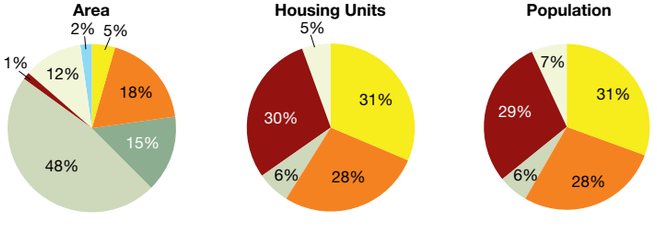
Land Ownership	Area (km²)	%
Public-Federal	4,287	3
Public-State	2,094	2
Public-Local	5	0
Private	127,525	95

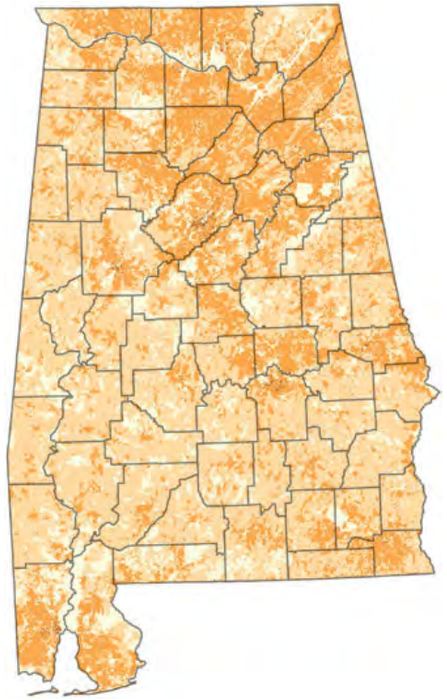
Land Cover	Area (km²)	%
Forest	70,675	53
Shrubland/herbaceous	17,237	13
Planted/cultivated	23,144	17
Developed	9,237	7
Water/wetland	13,268	10
Others	348	0
Total area	133,911	

Wildfire History



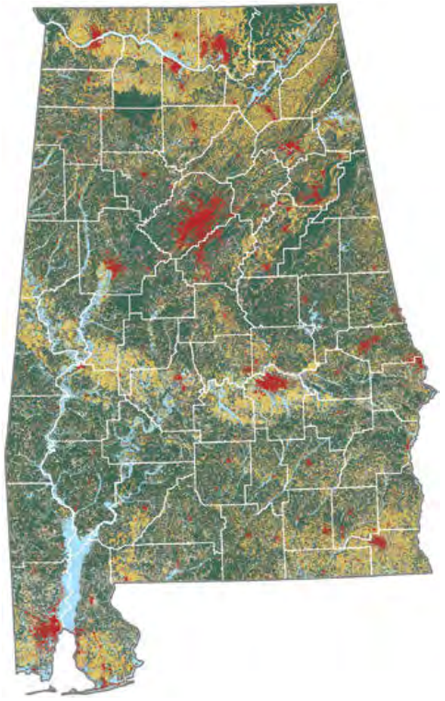
WUI in Numbers (see legend)



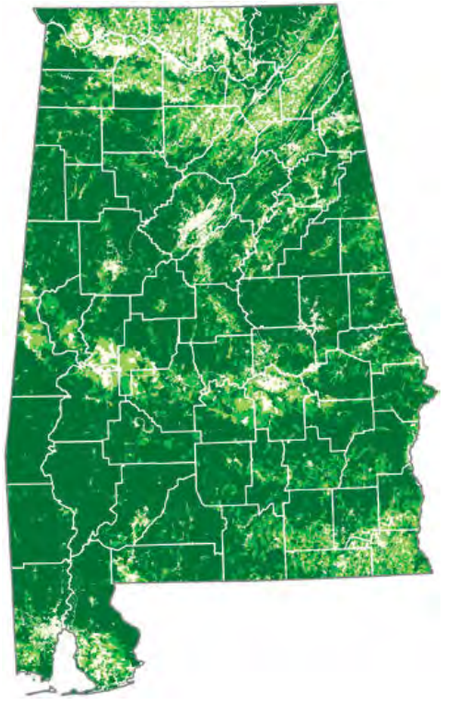


Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0

Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private



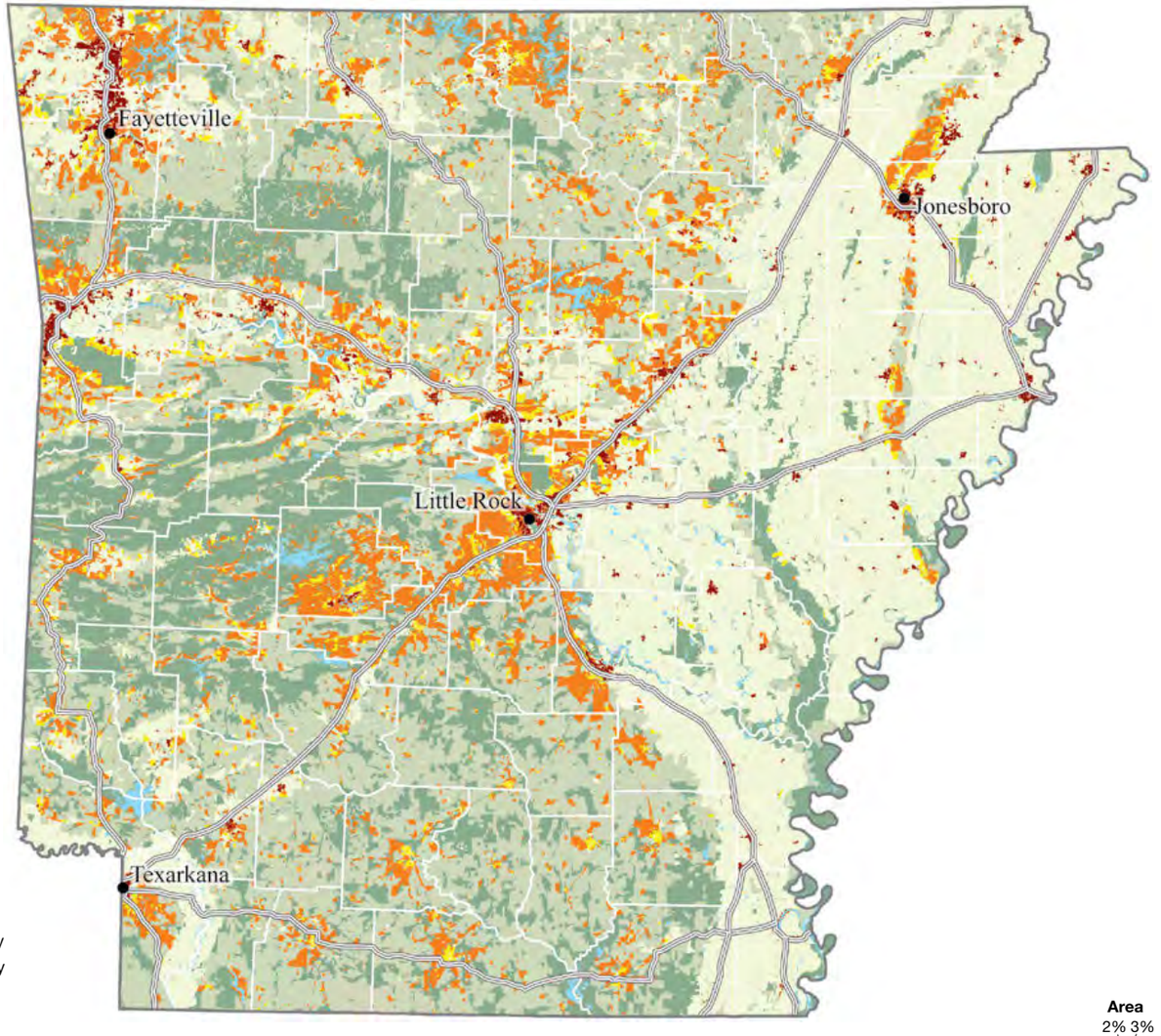
Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

Arkansas

Southern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

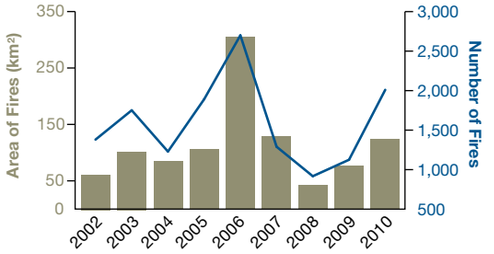
Population and Geography Overview

Census Data	Number	%
Population	2,915,918	
Housing units	1,316,299	
Seasonal use	38,153	3

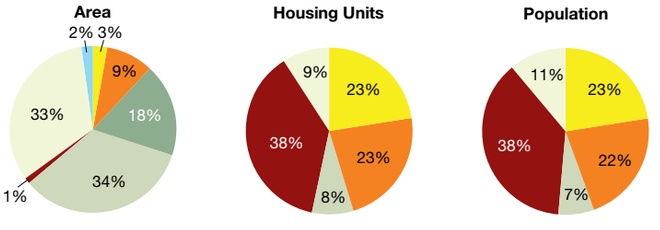
Land Ownership	Area (km²)	%
Public-Federal	13,428	10
Public-State	3,551	3
Public-Local	0	0
Private	120,753	88

Land Cover	Area (km²)	%
Forest	62,943	46
Shrubland/herbaceous	6,104	4
Planted/cultivated	45,690	33
Developed	7,903	6
Water/wetland	14,901	11
Others	190	0
Total area	137,732	

Wildfire History

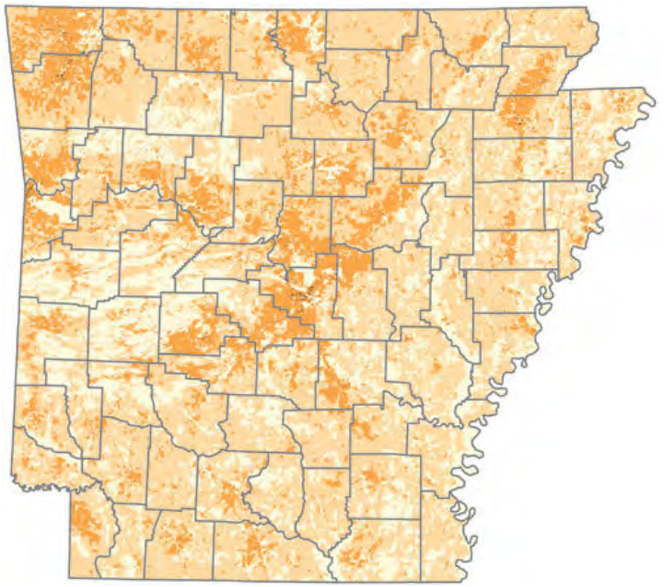


WUI in Numbers (see legend)



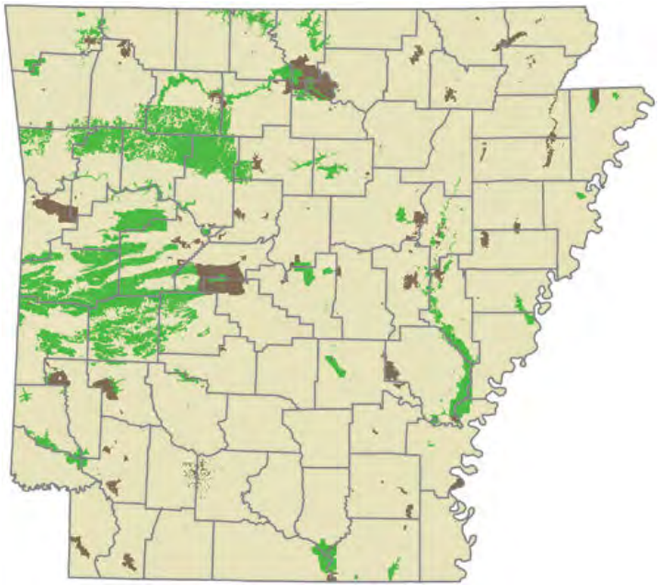
Housing Density
(houses per km^2)

- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



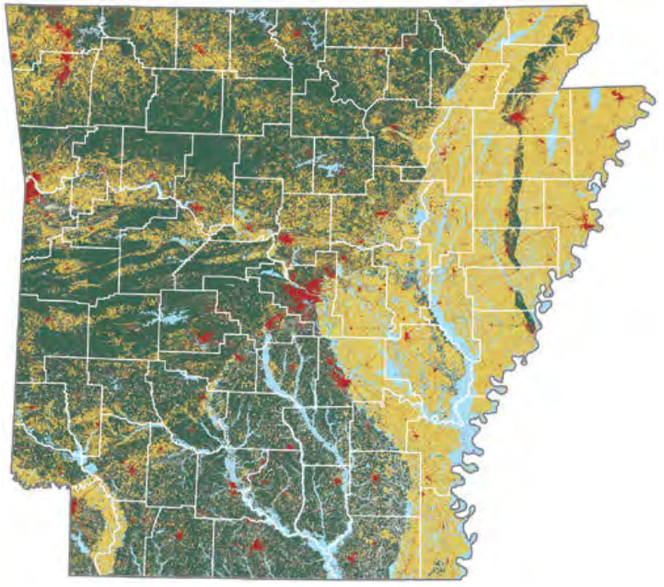
Land Ownership

- Public-Federal
- Public-State
- Public-Local
- Private



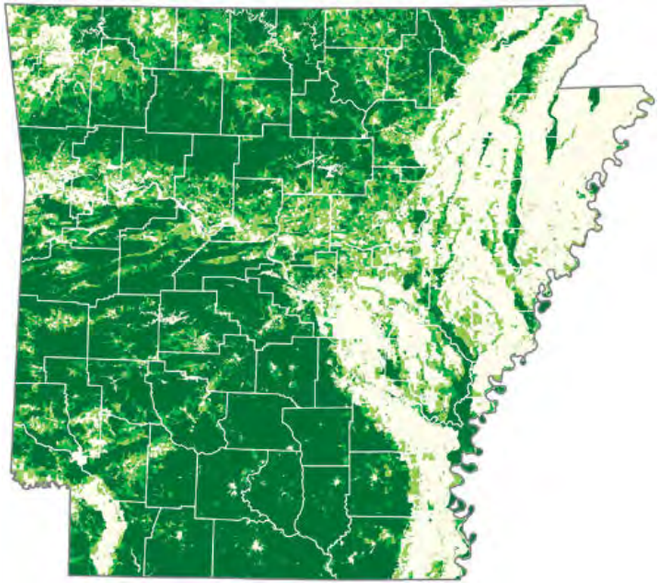
Land Cover

- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



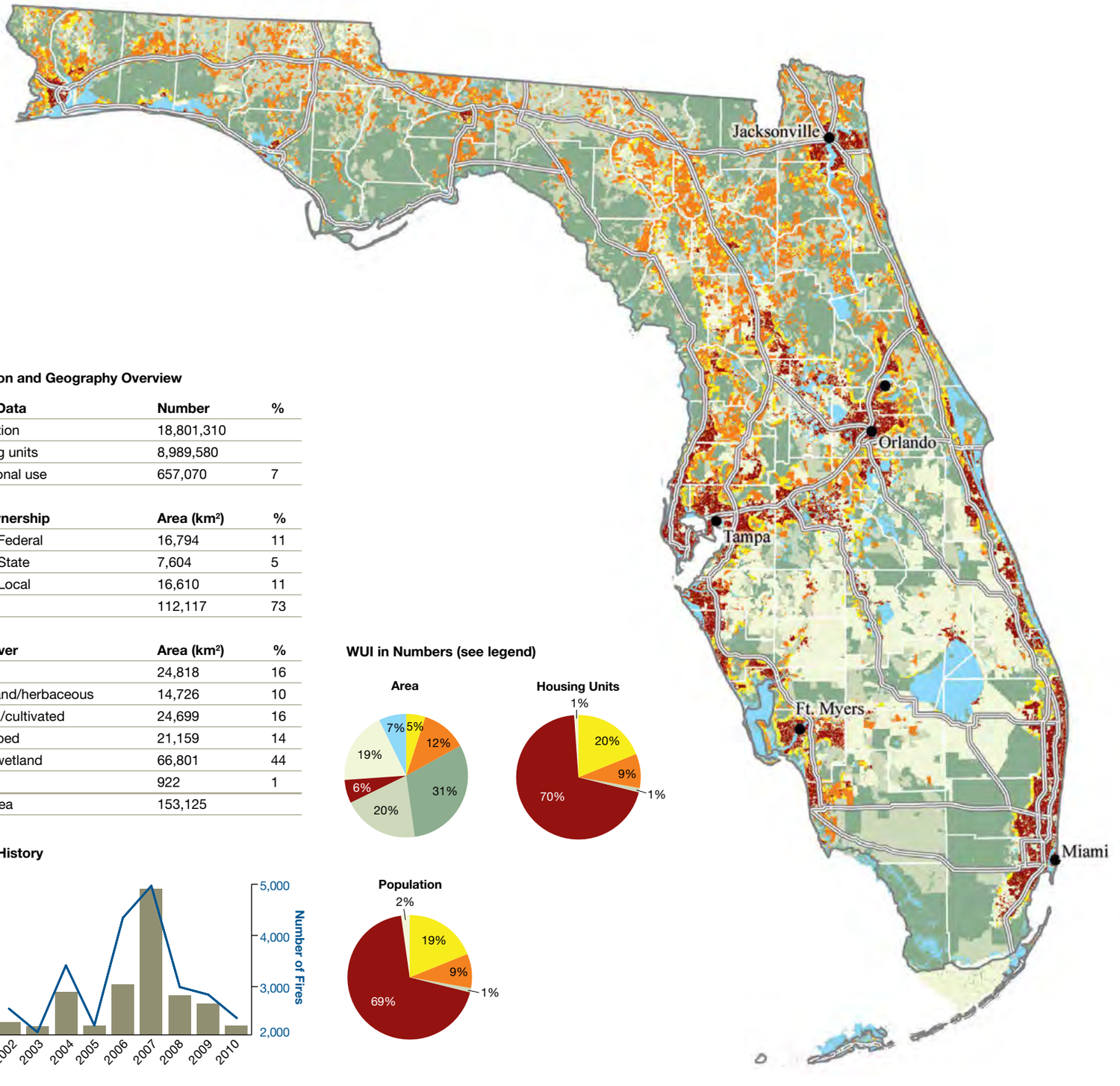
Wildland Vegetation Cover
(per Census block, %)

- 75-100
- 50-74
- 25-49
- 0-24



Florida

Southern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 75 150 km

For more information on the maps and data presented here, please refer to page 20.

Population and Geography Overview

Census Data	Number	%
Population	18,801,310	
Housing units	8,989,580	
Seasonal use	657,070	7

Land Ownership	Area (km²)	%
Public-Federal	16,794	11
Public-State	7,604	5
Public-Local	16,610	11
Private	112,117	73

Land Cover	Area (km²)	%
Forest	24,818	16
Shrubland/herbaceous	14,726	10
Planted/cultivated	24,699	16
Developed	21,159	14
Water/wetland	66,801	44
Others	922	1
Total area	153,125	

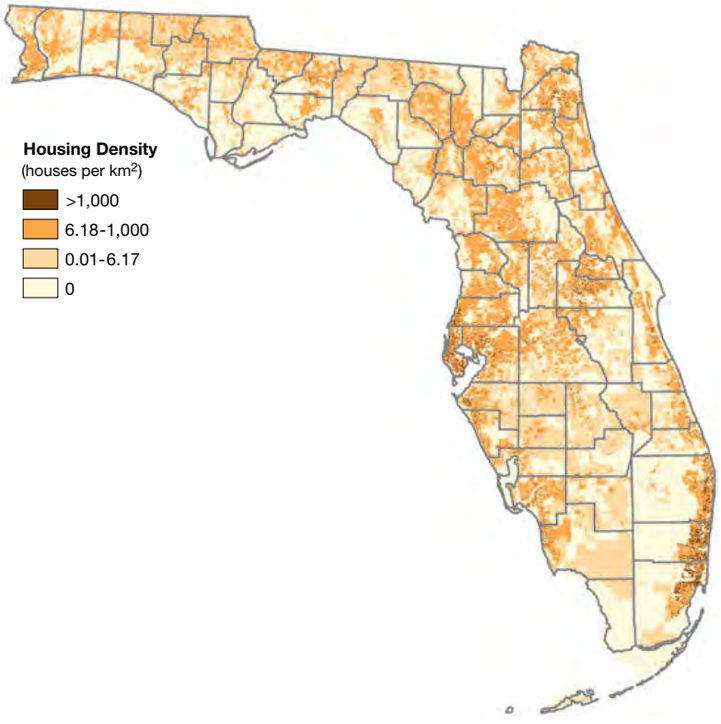
Wildfire History

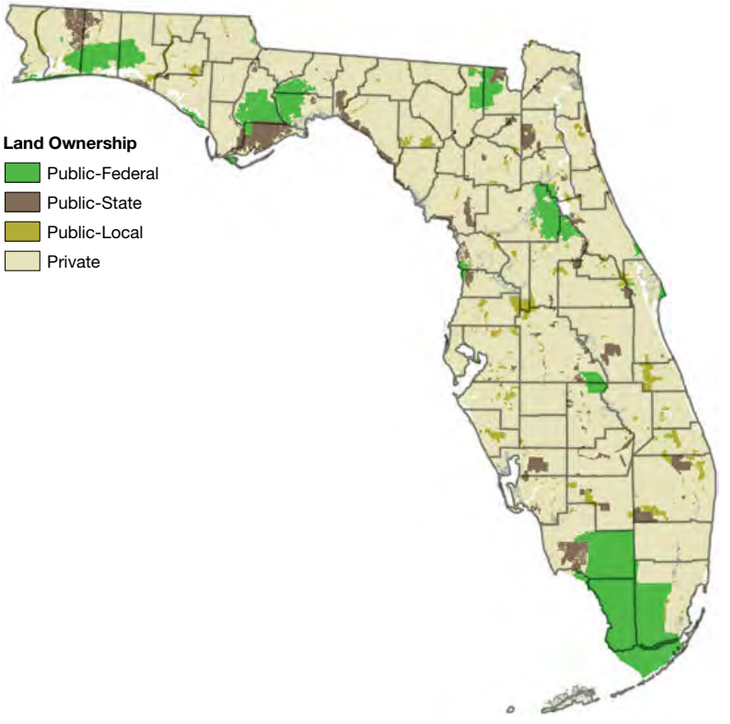
WUI in Numbers (see legend)

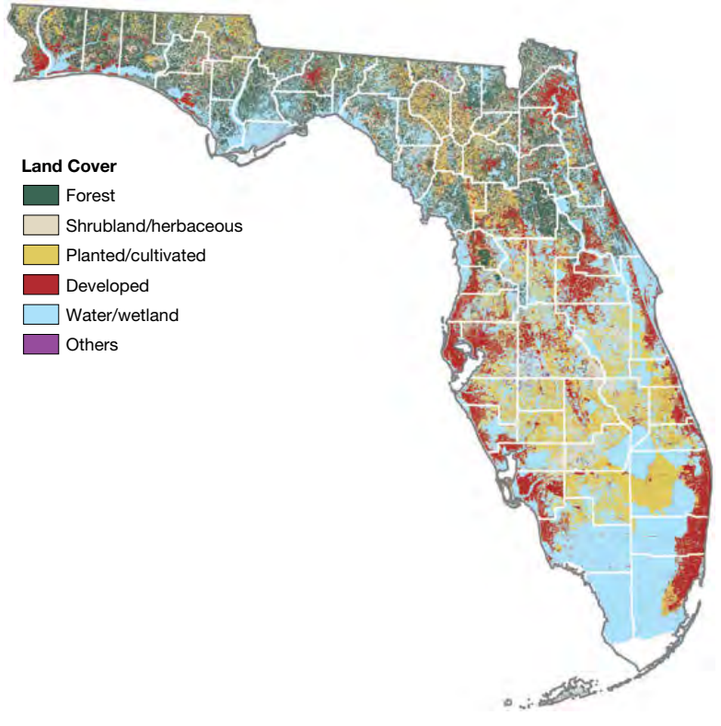
Area

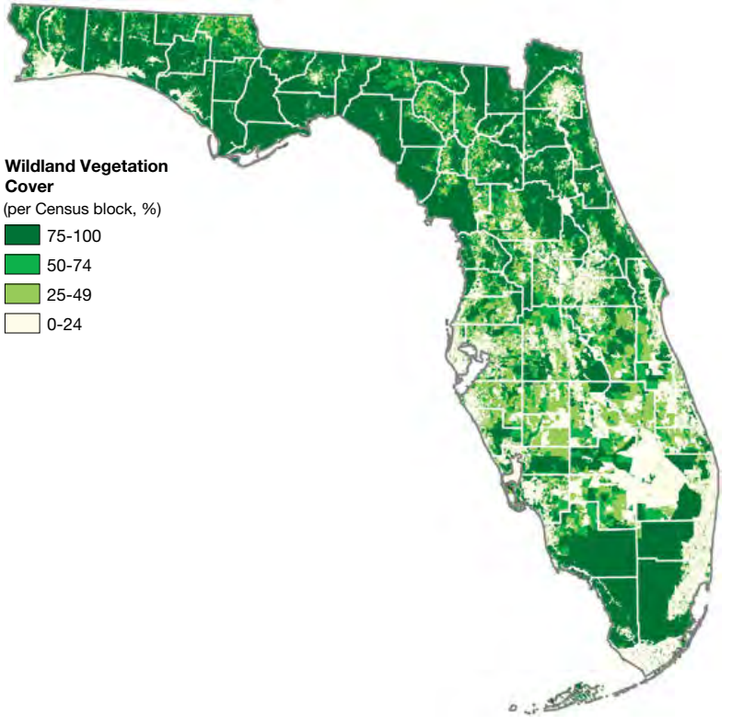
Housing Units

Population


Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

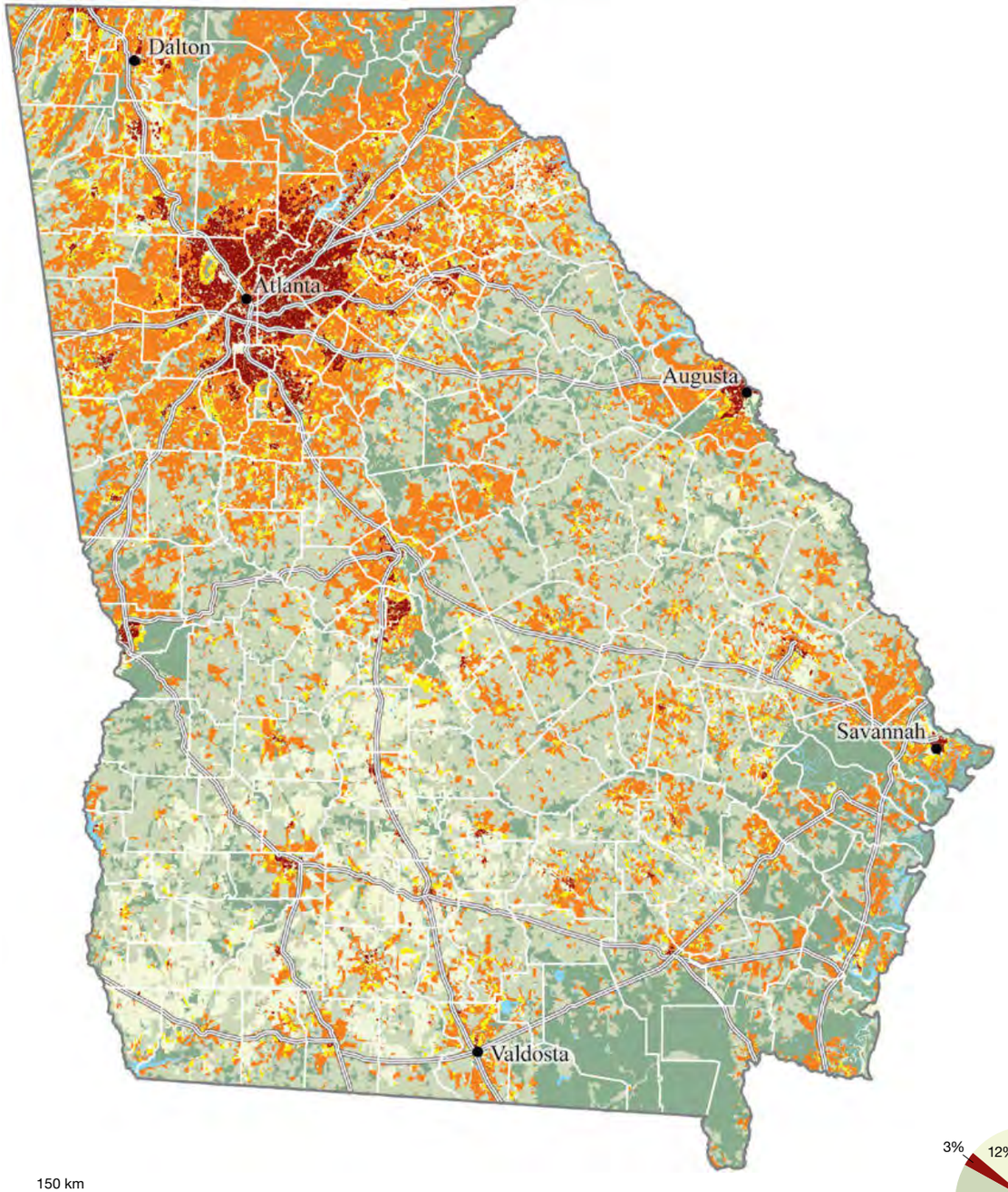

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Georgia

Southern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 — 75 — 150 km

For more information on the maps and data presented here, please refer to page 20.

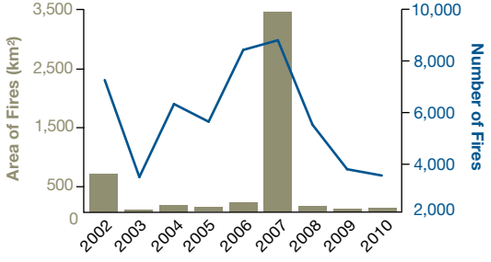
Population and Geography Overview

Census Data	Number	%
Population	9,687,653	
Housing units	4,088,801	
Seasonal use	81,511	2

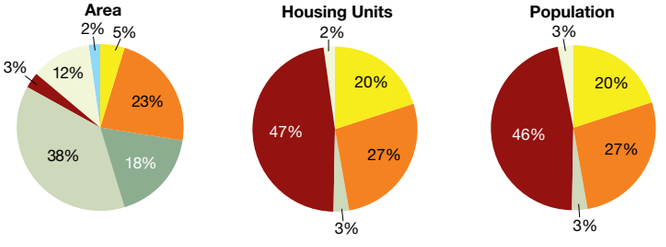
Land Ownership	Area (km²)	%
Public-Federal	8,066	5
Public-State	2,246	1
Public-Local	89	0
Private	142,278	93

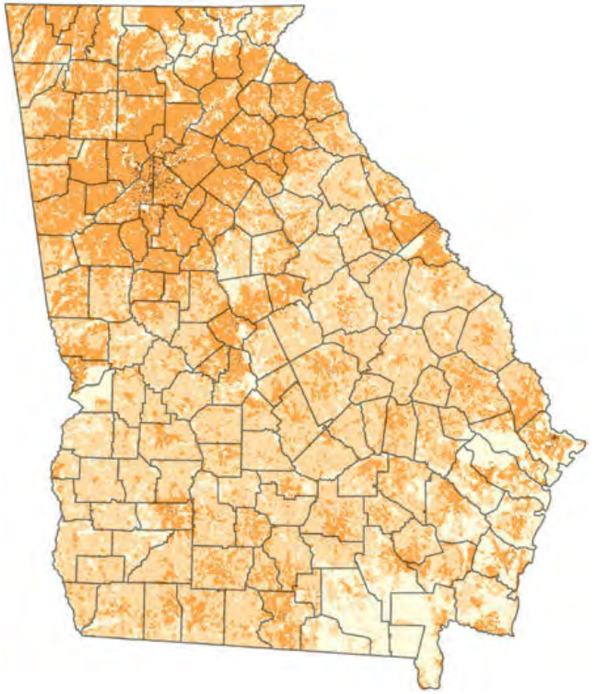
Land Cover	Area (km²)	%
Forest	70,293	46
Shrubland/herbaceous	16,001	10
Planted/cultivated	27,360	18
Developed	14,468	9
Water/wetland	24,041	16
Others	516	0
Total area	152,678	

Wildfire History

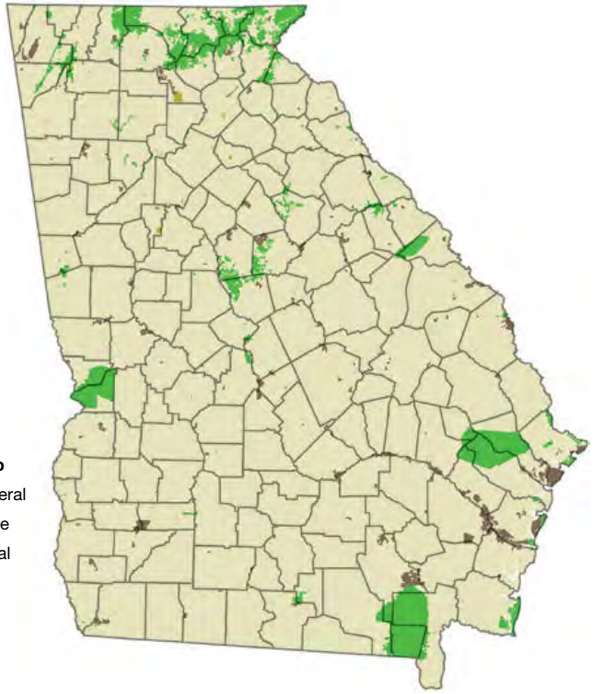


WUI in Numbers (see legend)

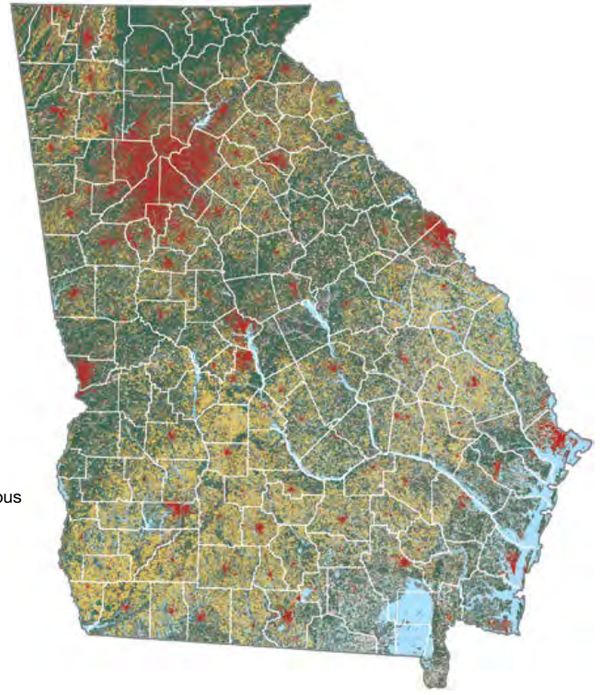




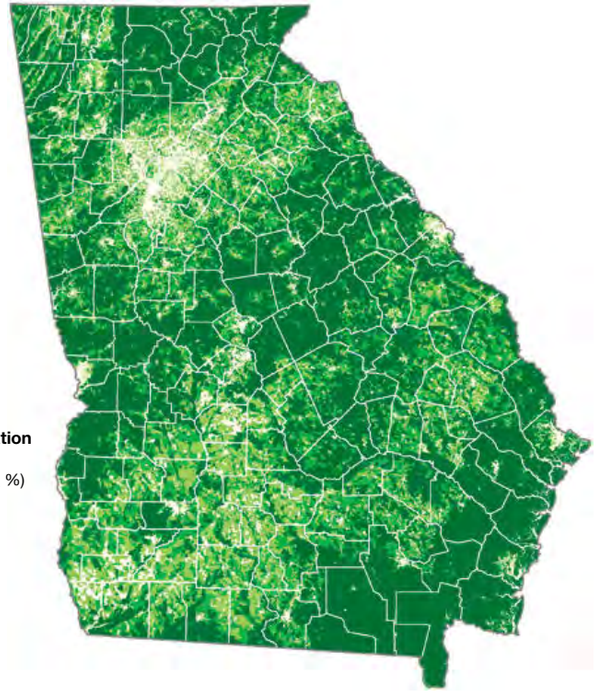
Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private



Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

Kentucky

Southern Region

Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

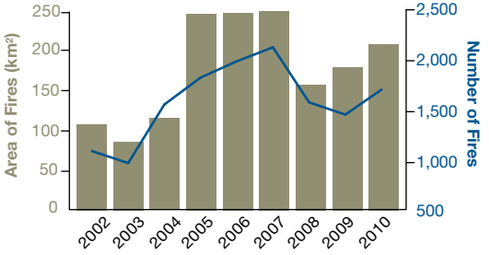
Population and Geography Overview

Census Data	Number	%
Population	4,339,367	
Housing units	1,927,164	
Seasonal use	38,616	2

Land Ownership	Area (km²)	%
Public-Federal	4,312	4
Public-State	2,052	2
Public-Local	31	0
Private	98,260	94

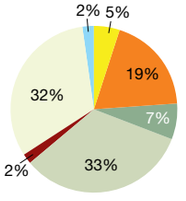
Land Cover	Area (km²)	%
Forest	54,594	52
Shrubland/herbaceous	4,685	4
Planted/cultivated	34,374	33
Developed	7,592	7
Water/wetland	3,022	3
Others	388	0
Total area	104,656	

Wildfire History

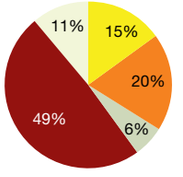


WUI in Numbers (see legend)

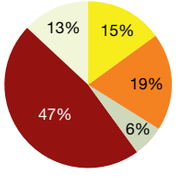
Area

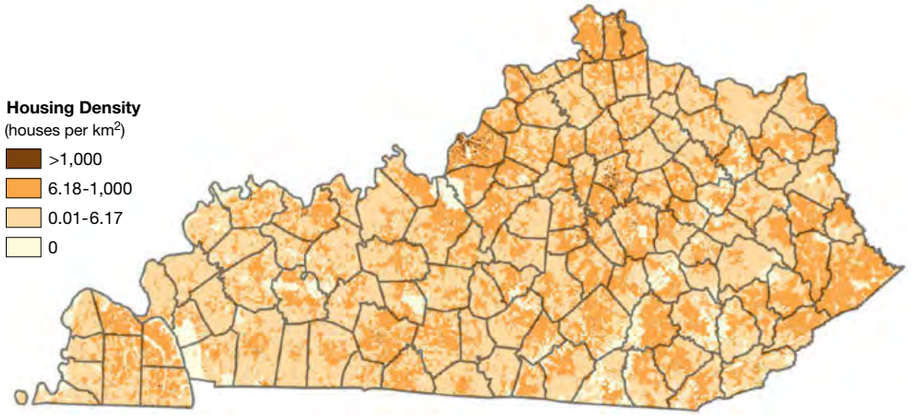


Housing Units

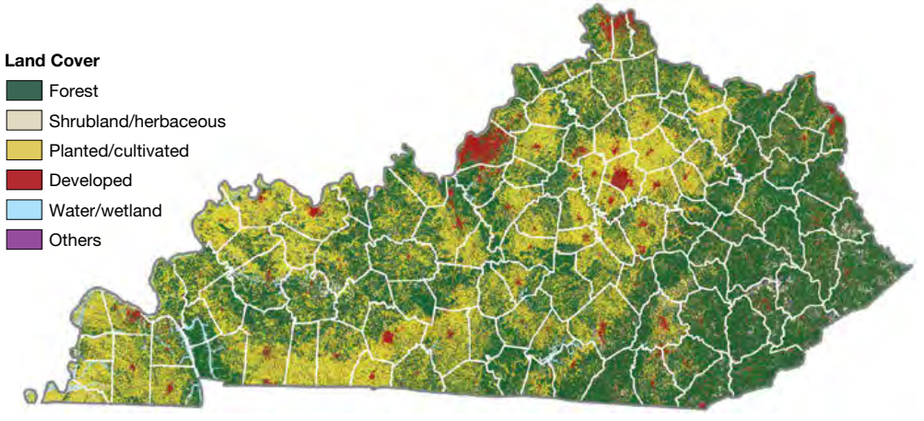


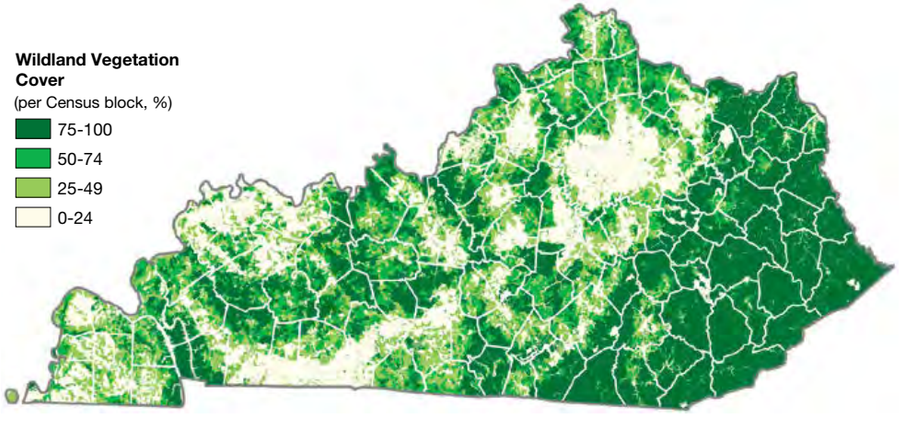
Population




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

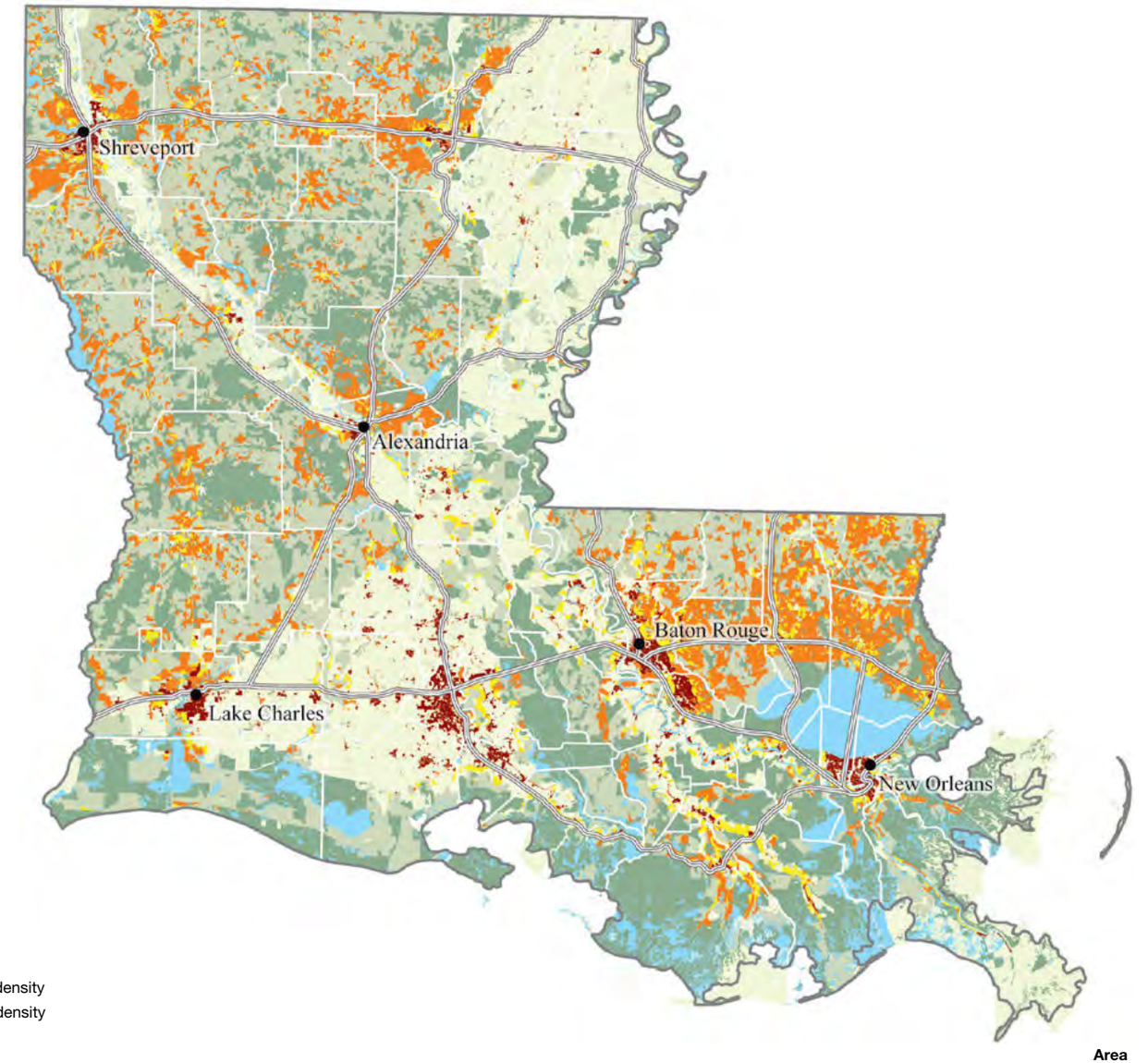

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Louisiana

Southern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

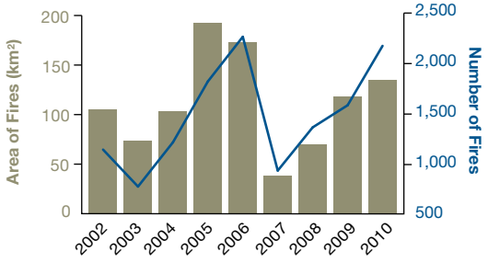
Population and Geography Overview

Census Data	Number	%
Population	4,533,372	
Housing units	1,964,981	
Seasonal use	42,253	2

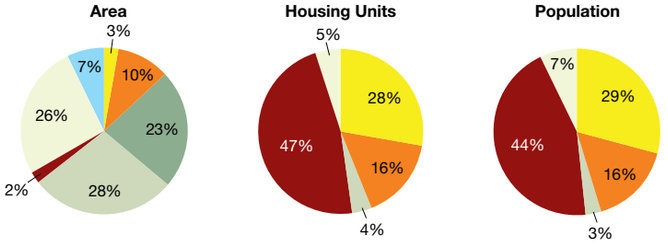
Land Ownership	Area (km²)	%
Public-Federal	5,594	4
Public-State	5,143	4
Public-Local	21	0
Private	114,555	91

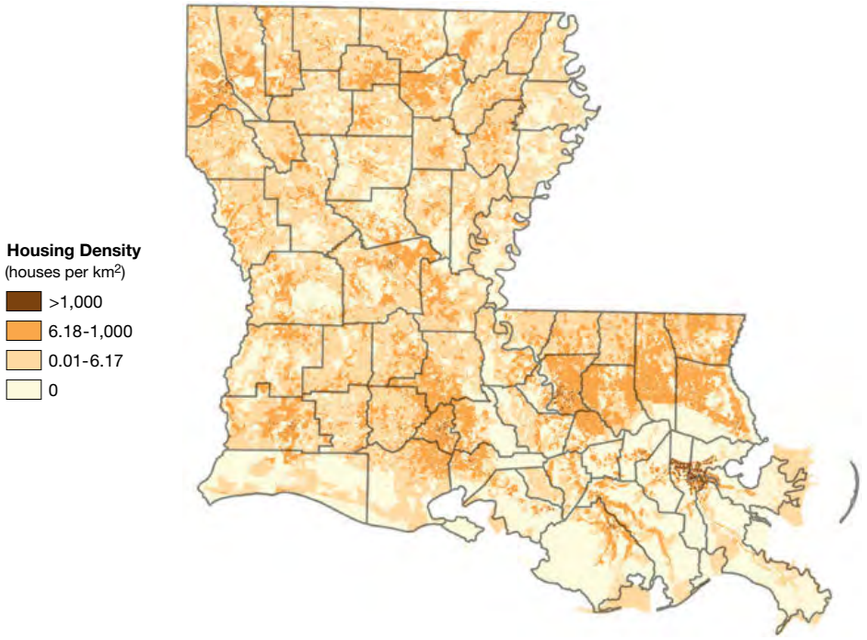
Land Cover	Area (km²)	%
Forest	26,077	21
Shrubland/herbaceous	10,388	8
Planted/cultivated	27,161	22
Developed	8,390	7
Water/wetland	52,916	42
Others	380	0
Total area	125,313	

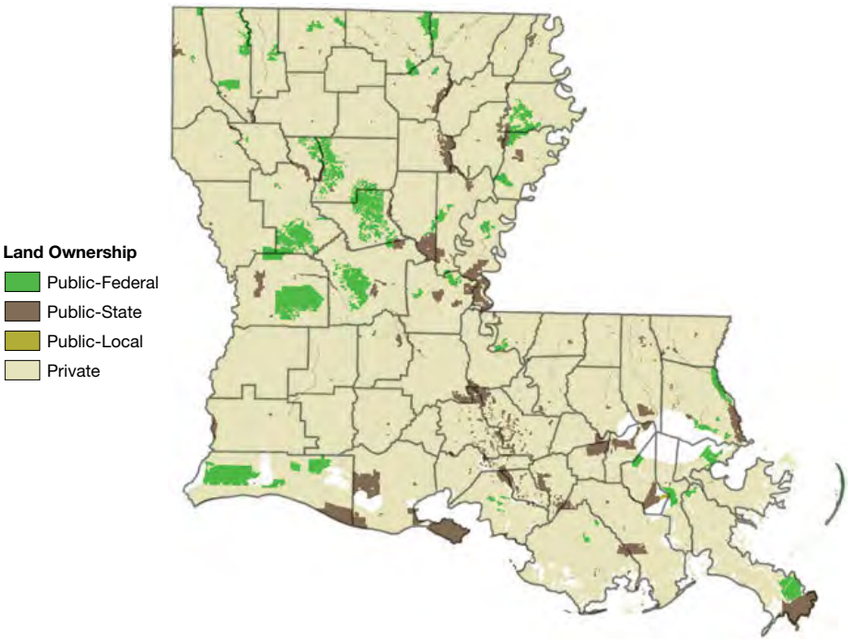
Wildfire History

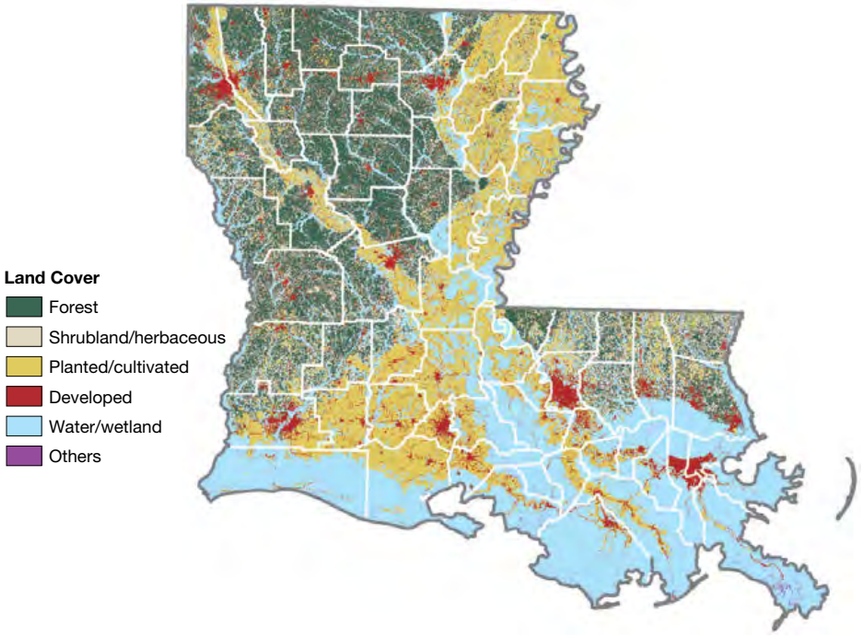


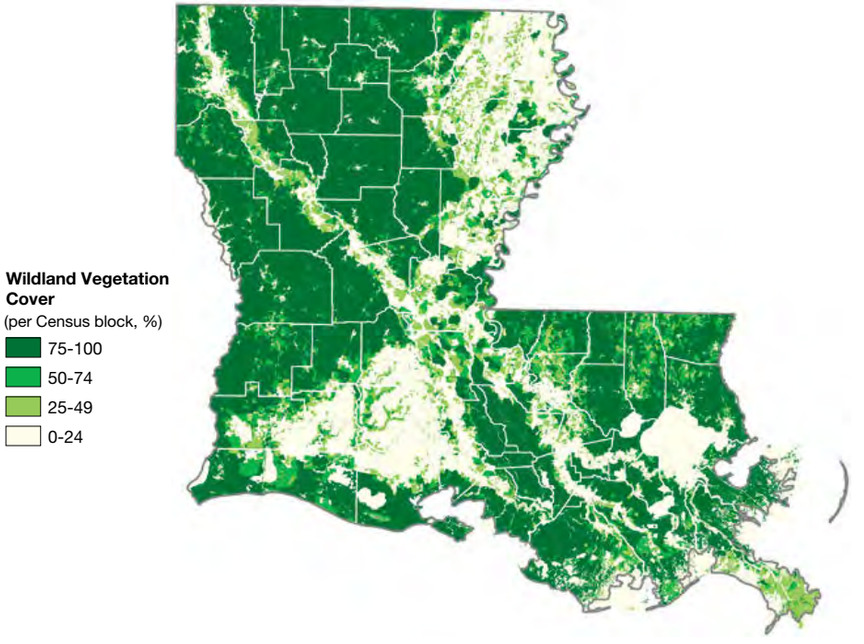
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

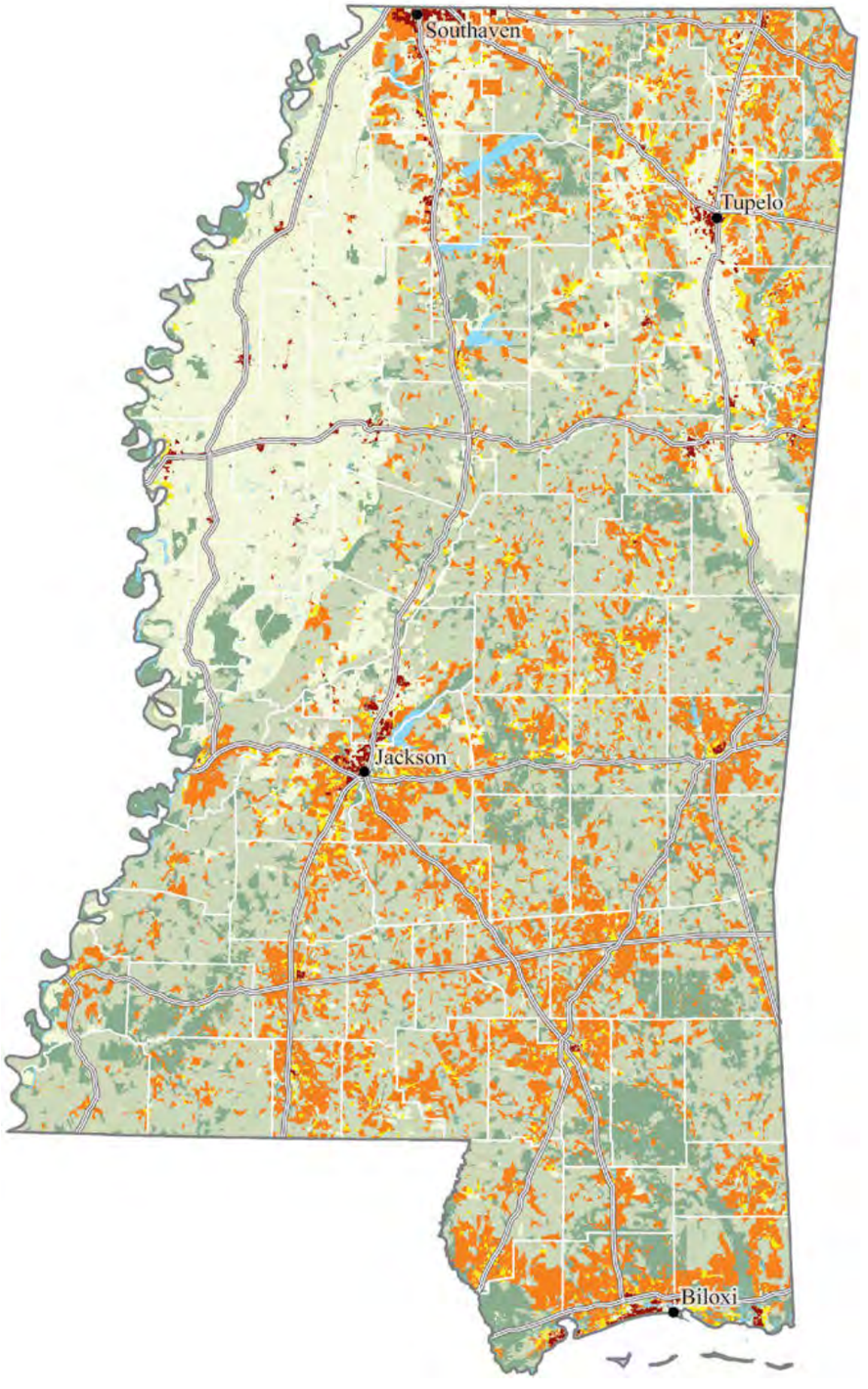

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Mississippi

Southern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

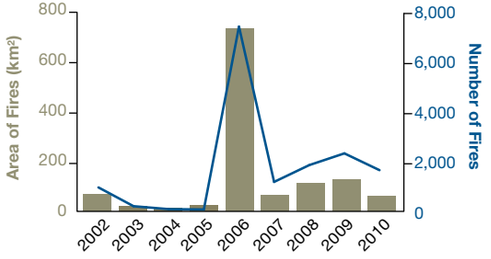
Population and Geography Overview

Census Data	Number	%
Population	2,967,297	
Housing units	1,274,719	
Seasonal use	28,867	2

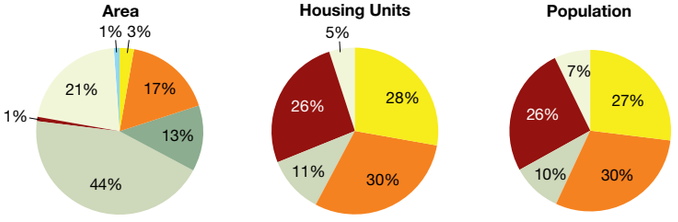
Land Ownership	Area (km²)	%
Public-Federal	4,293	3
Public-State	3,058	2
Public-Local	0	0
Private	116,172	94

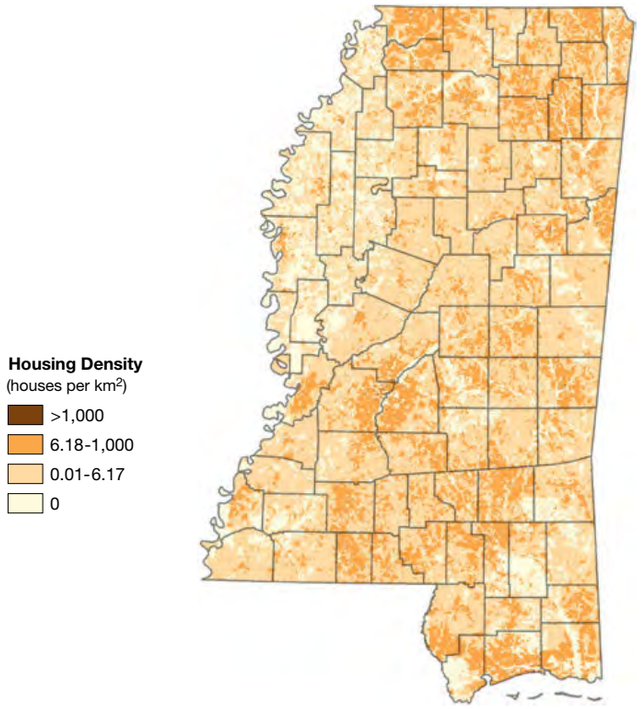
Land Cover	Area (km²)	%
Forest	47,776	39
Shrubland/herbaceous	16,246	13
Planted/cultivated	31,532	26
Developed	7,563	6
Water/wetland	20,195	16
Others	211	0
Total area	123,523	

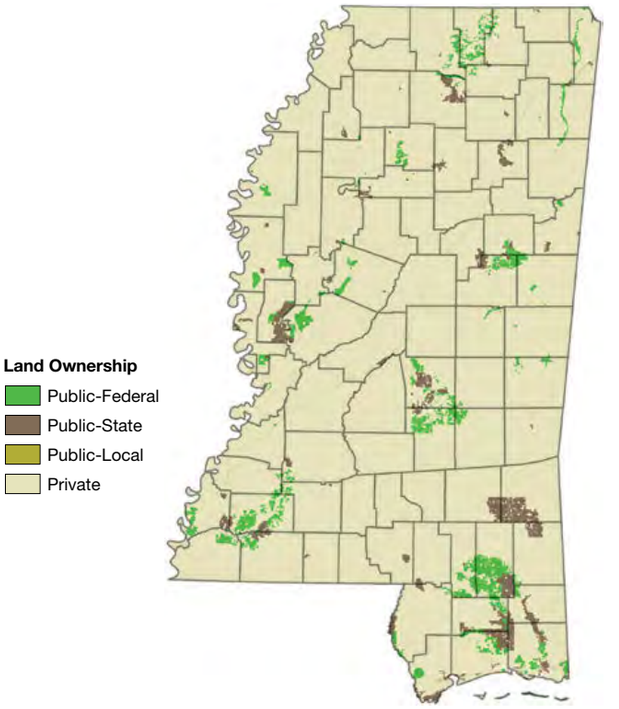
Wildfire History

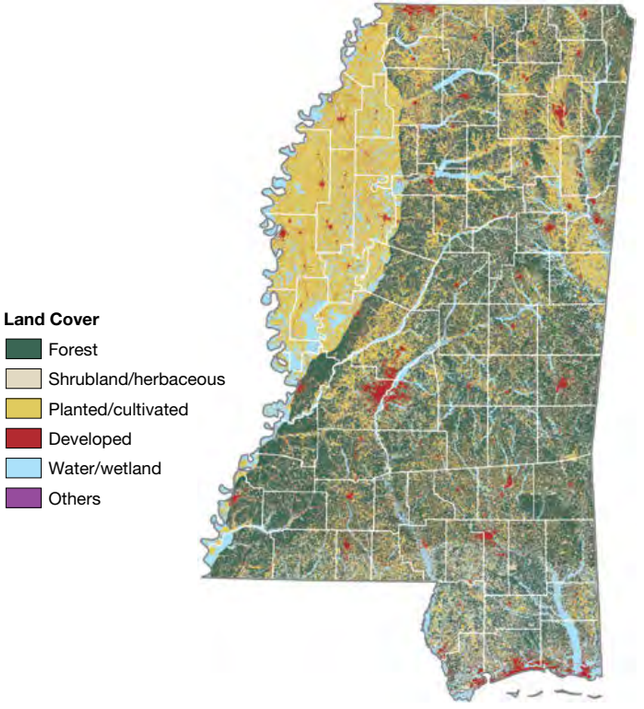


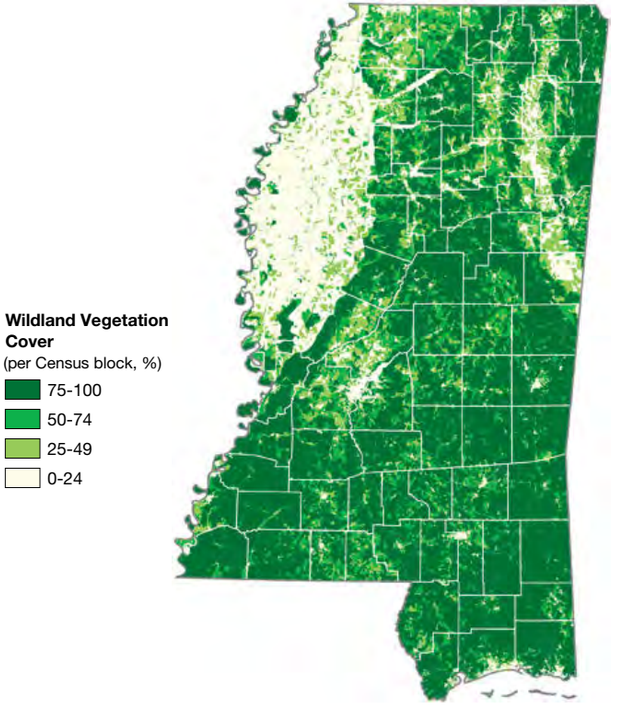
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0


Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

North Carolina

Southern Region

Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

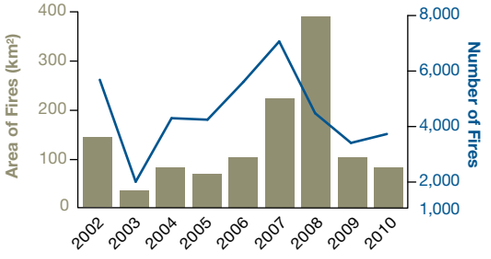
Population and Geography Overview

Census Data	Number	%
Population	9,535,483	
Housing units	4,327,528	
Seasonal use	191,508	4

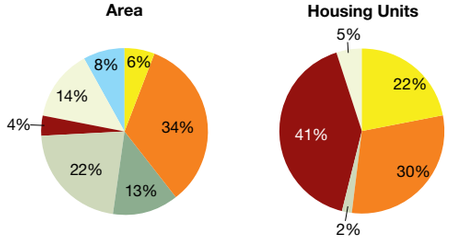
Land Ownership	Area (km²)	%
Public-Federal	10,310	8
Public-State	2,535	2
Public-Local	210	0
Private	123,359	90

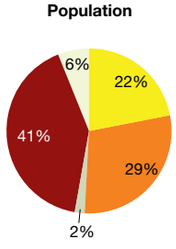
Land Cover	Area (km²)	%
Forest	55,742	41
Shrubland/herbaceous	11,379	8
Planted/cultivated	29,033	21
Developed	13,112	10
Water/wetland	26,566	19
Others	582	0
Total area	136,415	

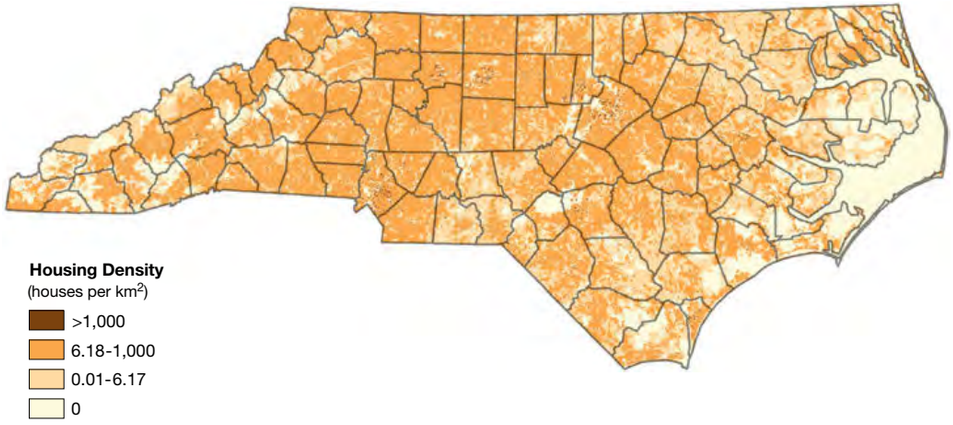
Wildfire History



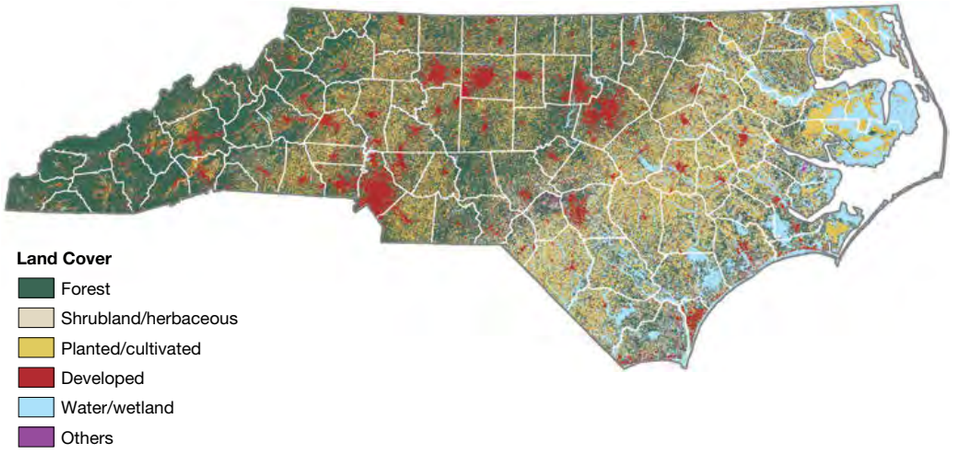
WUI in Numbers (see legend)

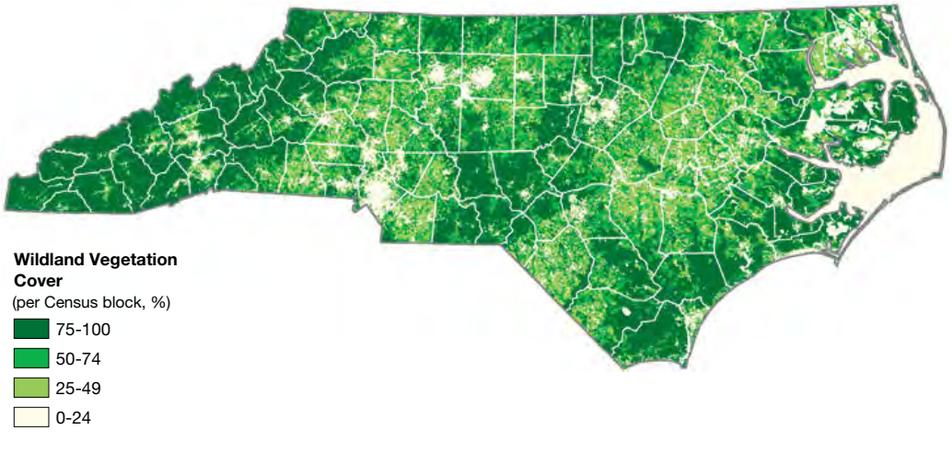





Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

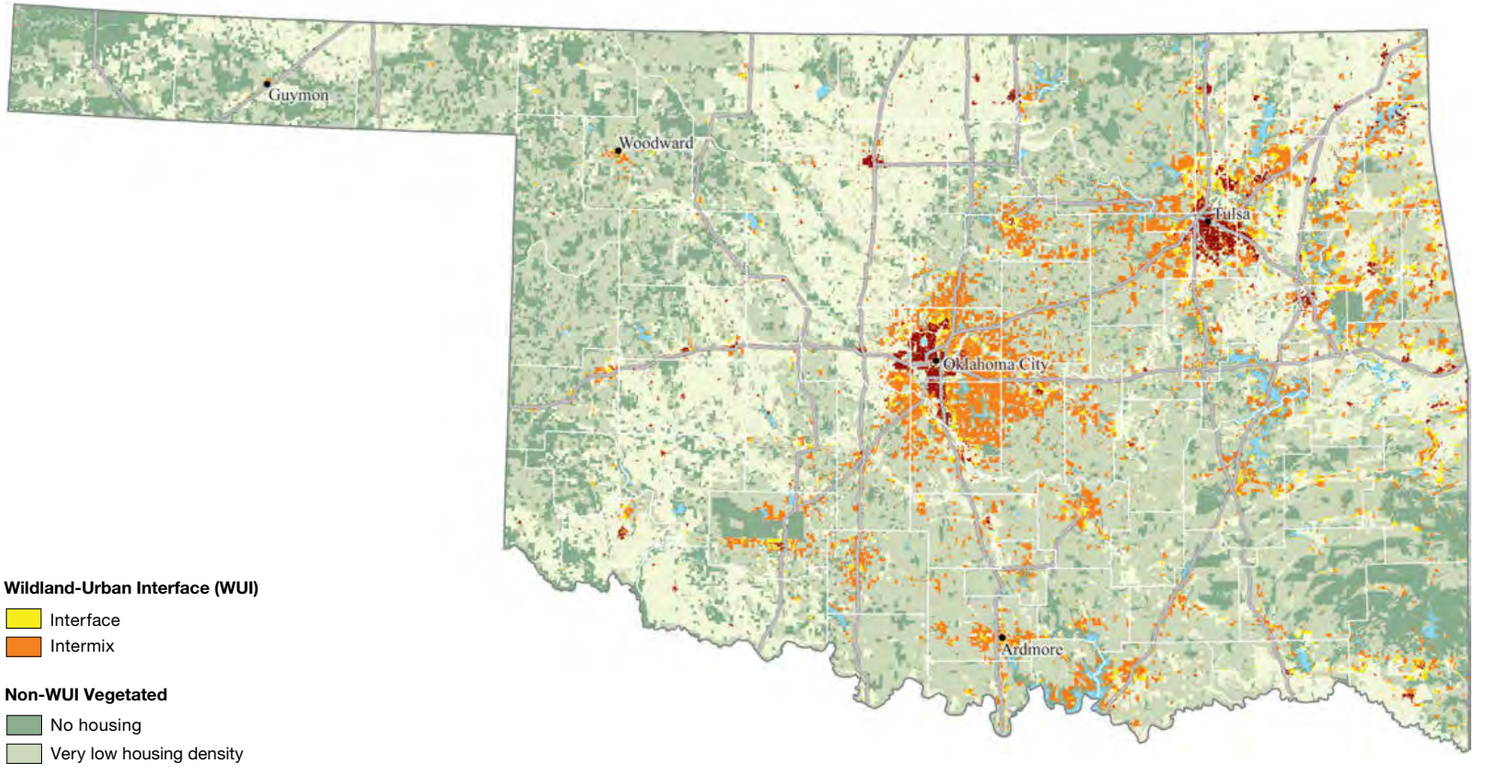

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Oklahoma

Southern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

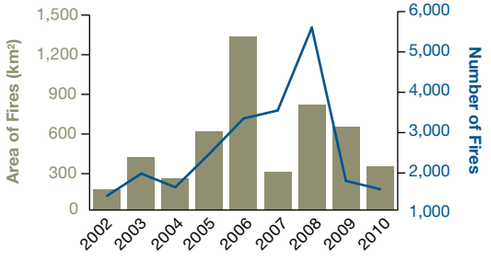
Population and Geography Overview

Census Data	Number	%
Population	3,751,351	
Housing units	1,664,378	
Seasonal use	35,187	2

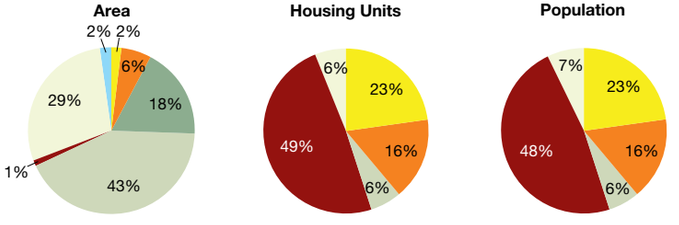
Land Ownership	Area (km²)	%
Public-Federal	3,676	2
Public-State	5,742	3
Public-Local	757	0
Private	170,863	94

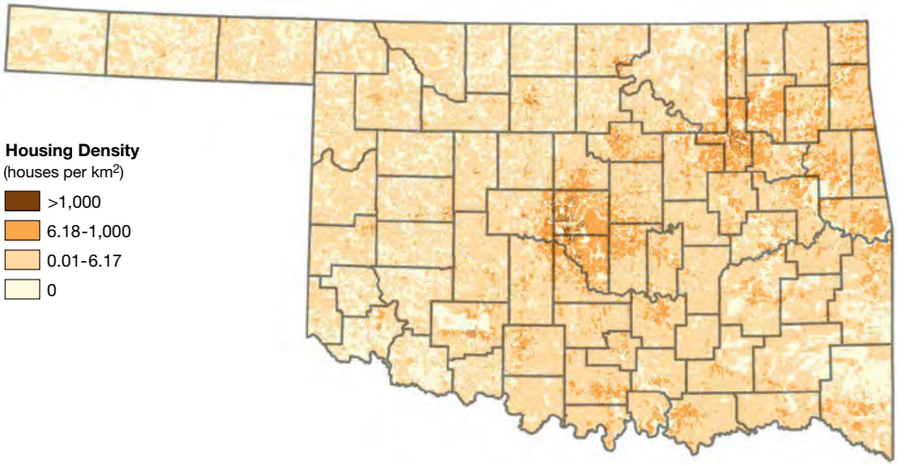
Land Cover	Area (km²)	%
Forest	38,581	21
Shrubland/herbaceous	73,312	40
Planted/cultivated	53,434	30
Developed	10,785	6
Water/wetland	4,552	3
Others	372	0
Total area	181,037	

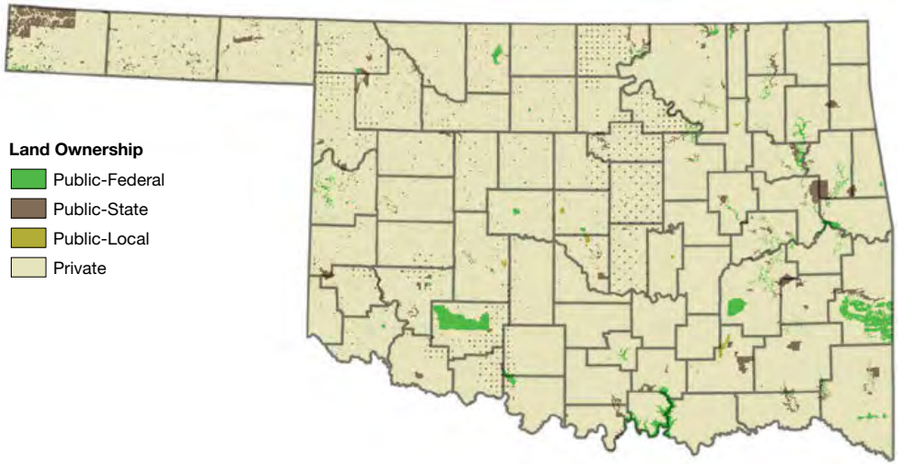
Wildfire History

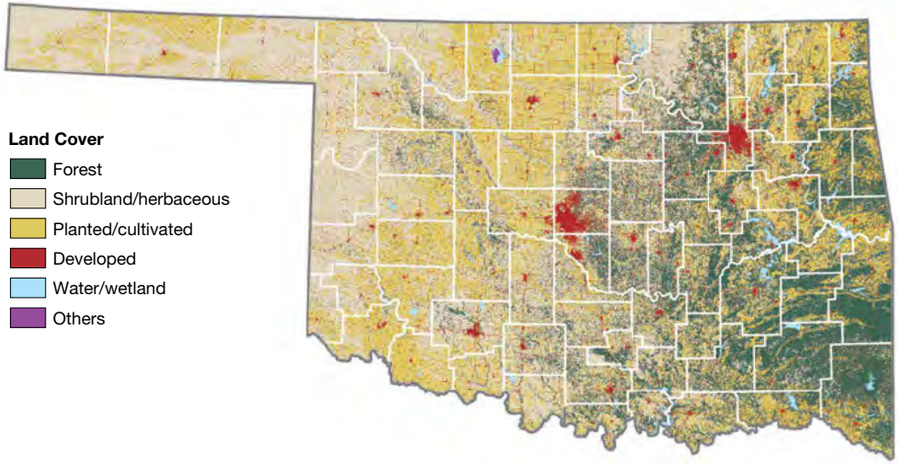


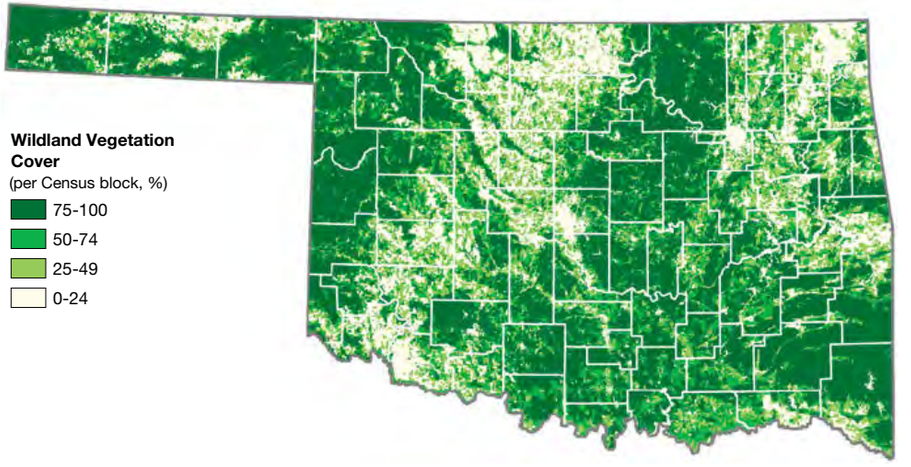
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

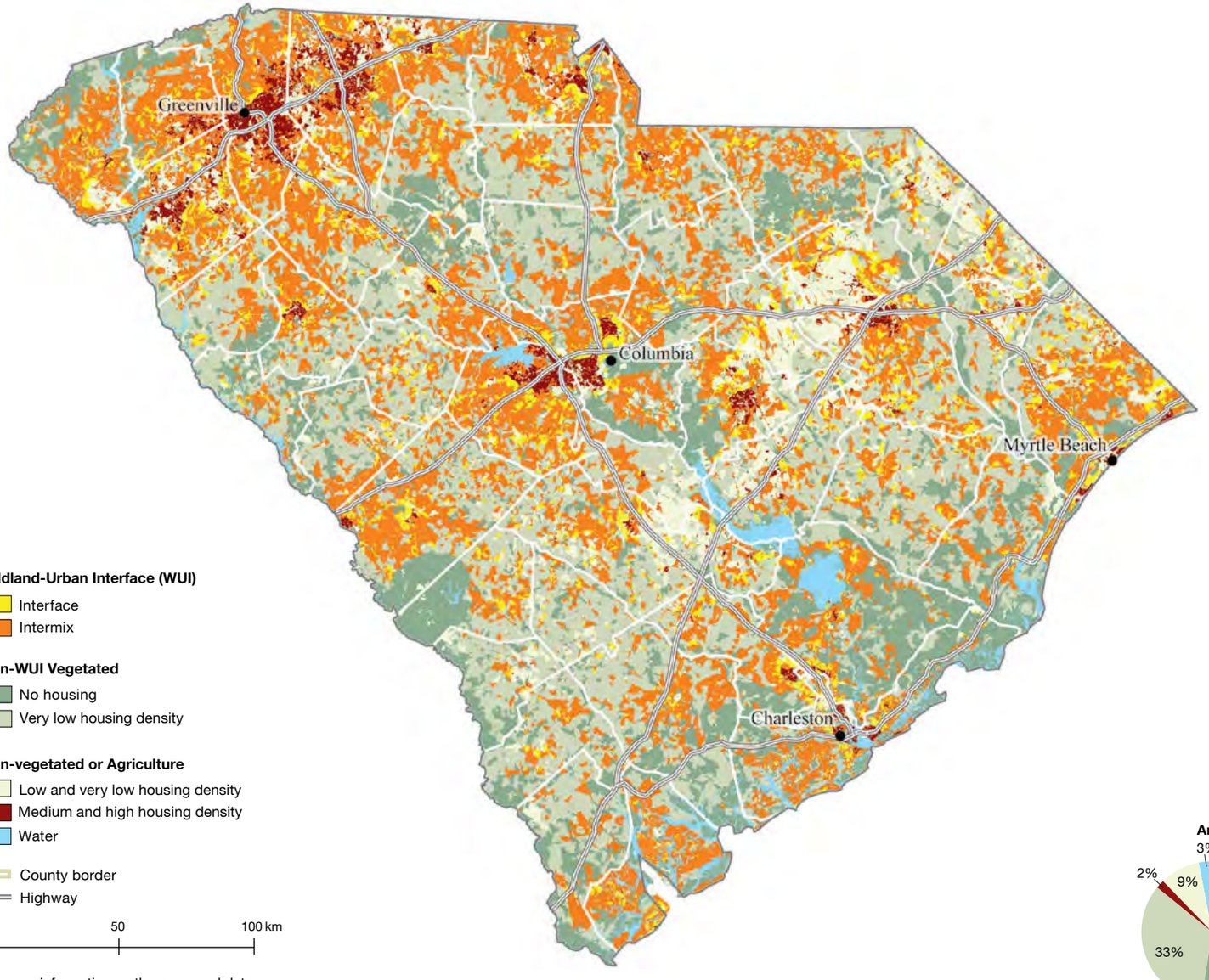

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

South Carolina

Southern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

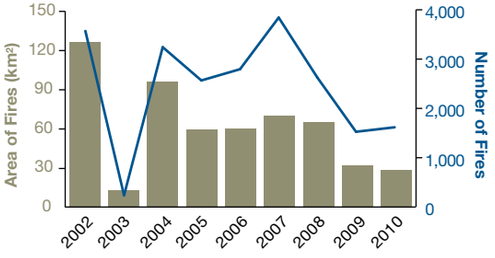
Population and Geography Overview

Census Data	Number	%
Population	4,625,364	
Housing units	2,137,683	
Seasonal use	112,531	5

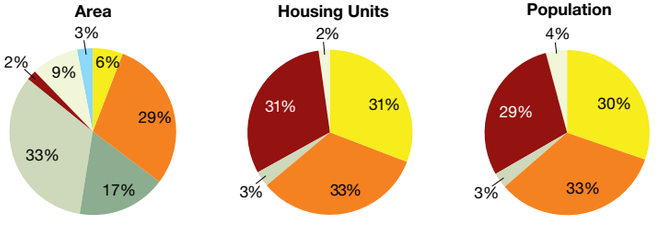
Land Ownership	Area (km²)	%
Public-Federal	4,495	6
Public-State	2,293	3
Public-Local	56	0
Private	73,767	92

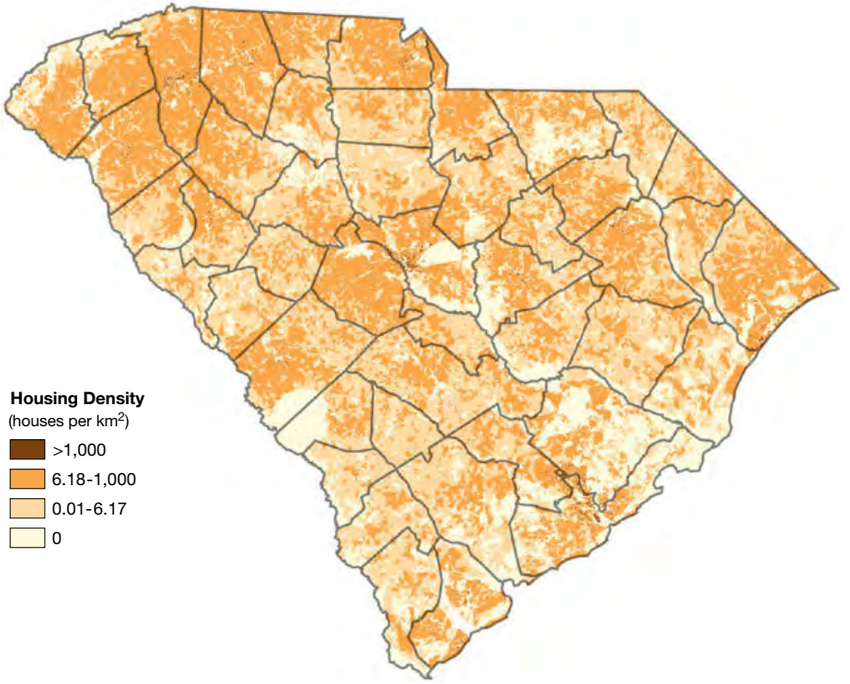
Land Cover	Area (km²)	%
Forest	31,494	39
Shrubland/herbaceous	9,830	12
Planted/cultivated	13,052	16
Developed	7,094	9
Water/wetland	18,777	23
Others	365	0
Total area	80,611	

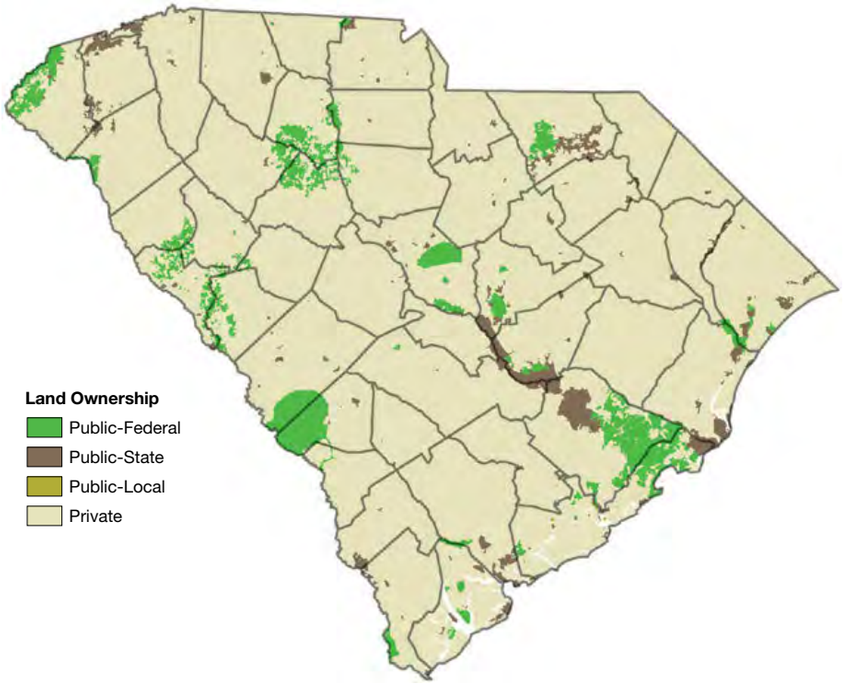
Wildfire History

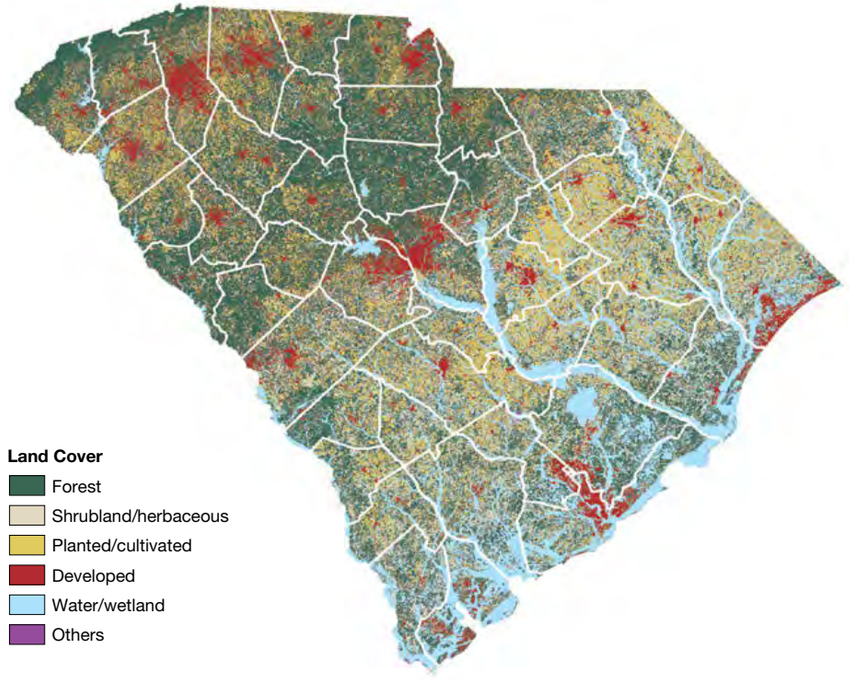


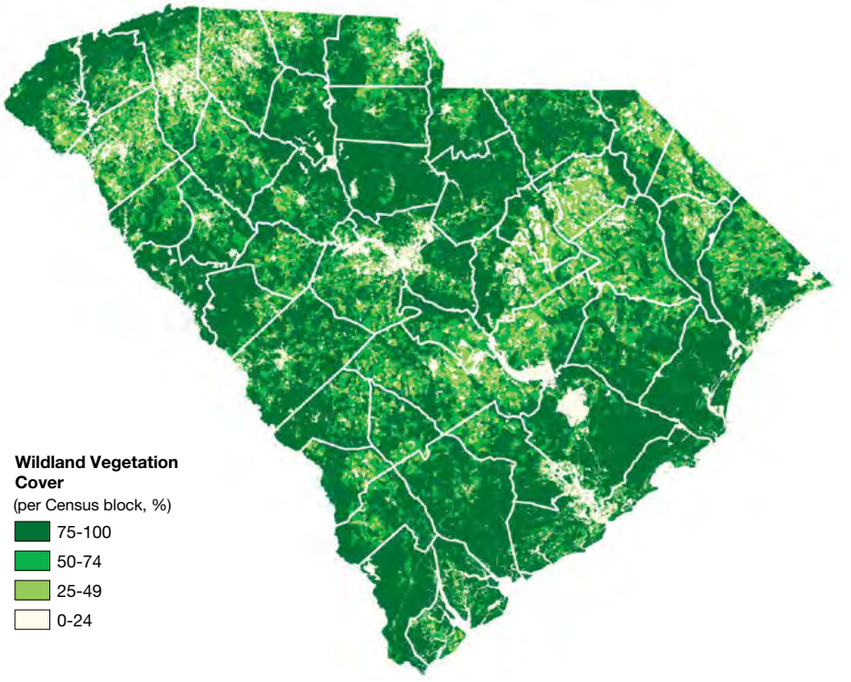
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

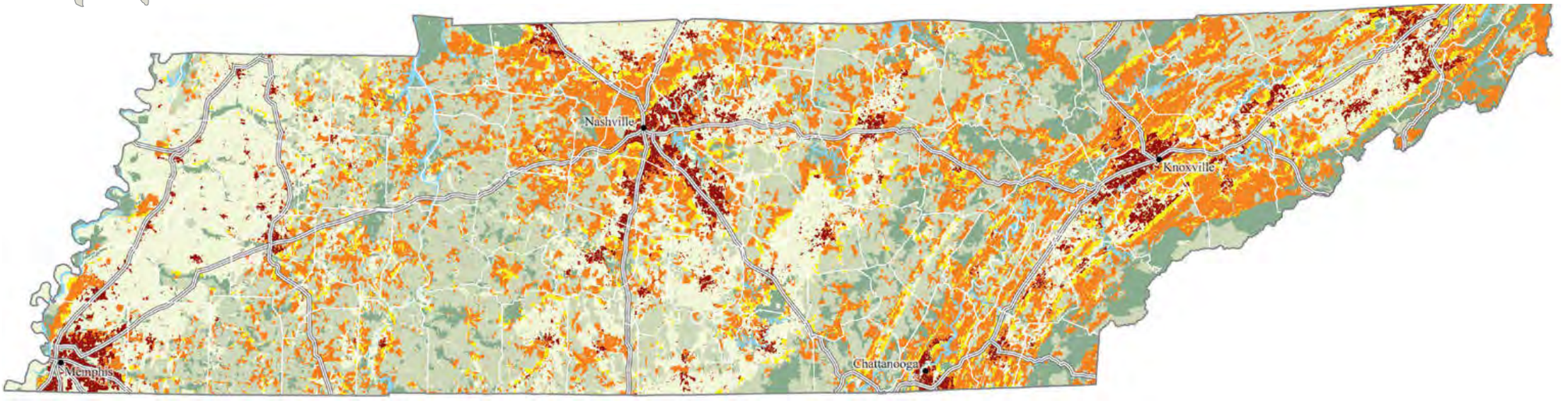

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Tennessee

Southern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

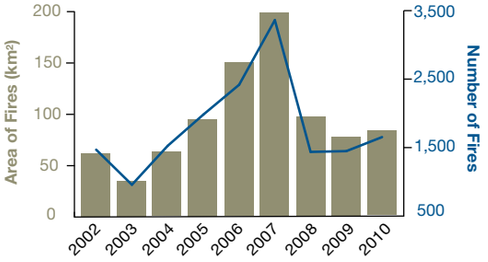
Population and Geography Overview

Census Data	Number	%
Population	6,346,105	
Housing units	2,812,133	
Seasonal use	60,778	2

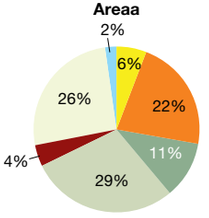
Land Ownership	Area (km²)	%
Public-Federal	6,873	6
Public-State	4,414	4
Public-Local	285	0
Private	97,580	89

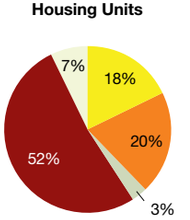
Land Cover	Area (km²)	%
Forest	54,906	50
Shrubland/herbaceous	6,530	6
Planted/cultivated	32,079	29
Developed	9,774	9
Water/wetland	5,652	5
Others	212	0
Total area	109,153	

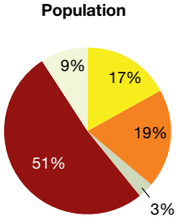
Wildfire History

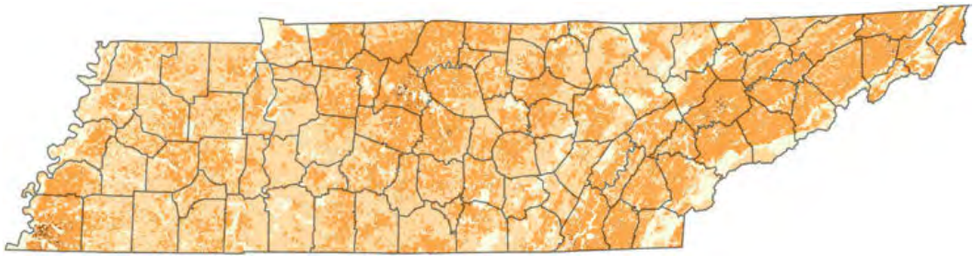


WUI in Numbers (see legend)









Housing Density
(houses per km^2)

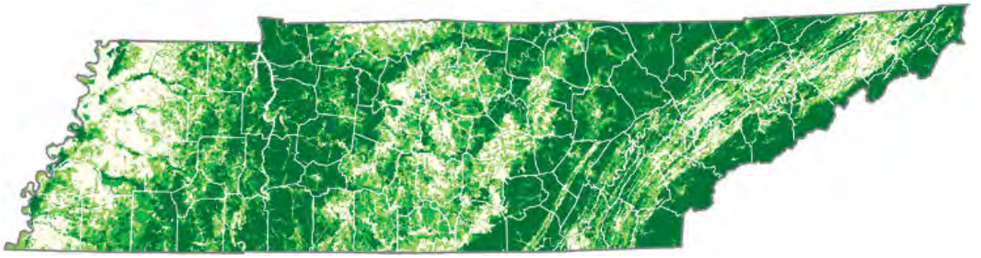
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0

Land Ownership

- Public-Federal
- Public-State
- Public-Local
- Private

Land Cover

- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



Wildland Vegetation Cover
(per Census block, %)

- 75-100
- 50-74
- 25-49
- 0-24

Texas

Southern Region

Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 150 300 km

For more information on the maps and data presented here, please refer to page 20.

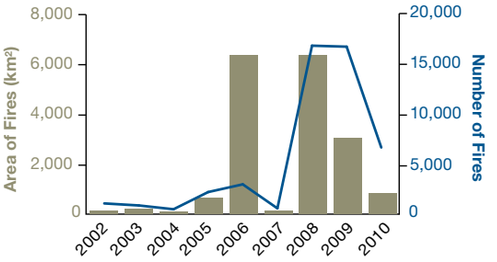
Population and Geography Overview

Census Data	Number	%
Population	25,145,561	
Housing units	9,977,436	
Seasonal use	208,733	2

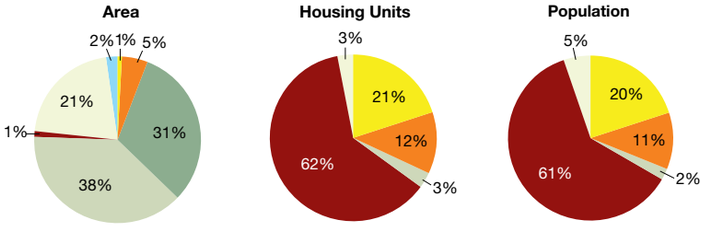
Land Ownership	Area (km²)	%
Public-Federal	15,712	2
Public-State	5,385	1
Public-Local	2	0
Private	670,054	97

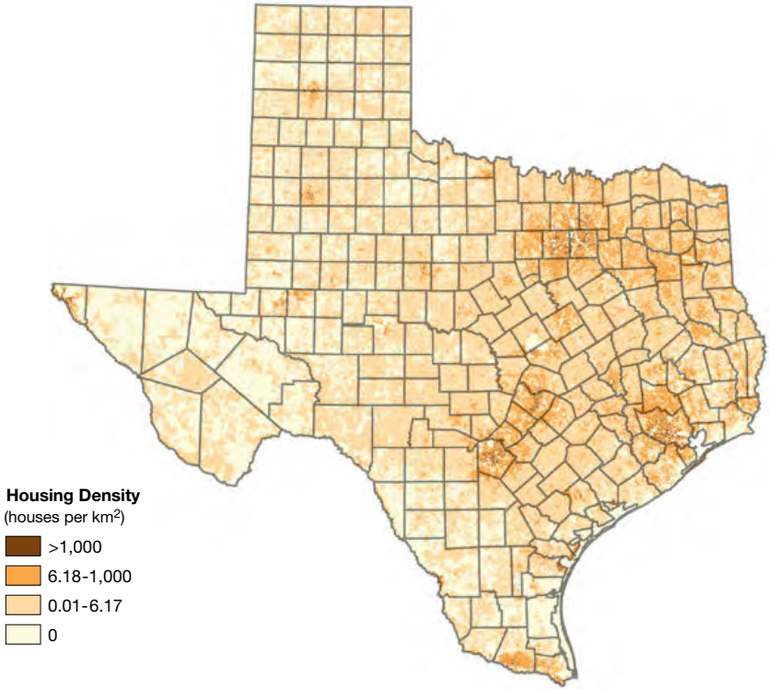
Land Cover	Area (km²)	%
Forest	70,195	10
Shrubland/herbaceous	393,789	57
Planted/cultivated	139,540	20
Developed	43,255	6
Water/wetland	40,035	6
Others	4,339	1
Total area	691,153	

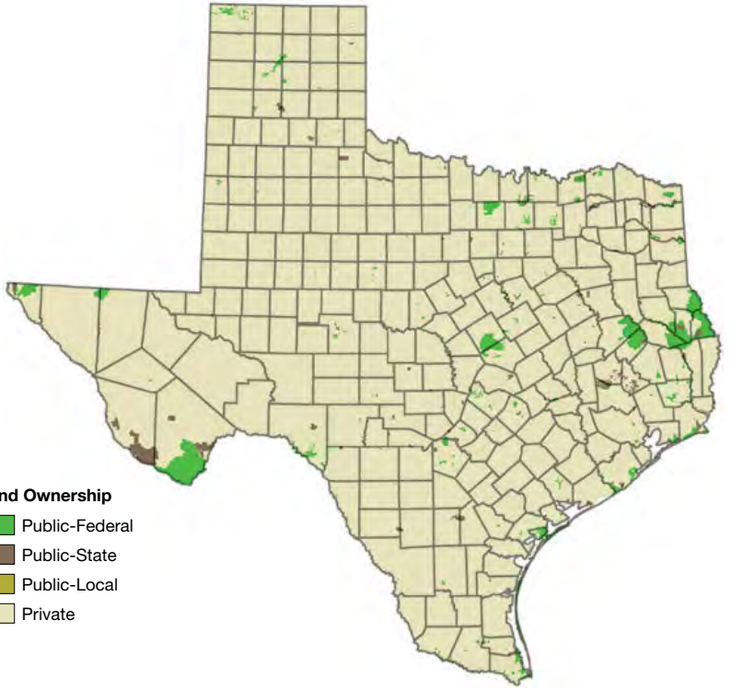
Wildfire History

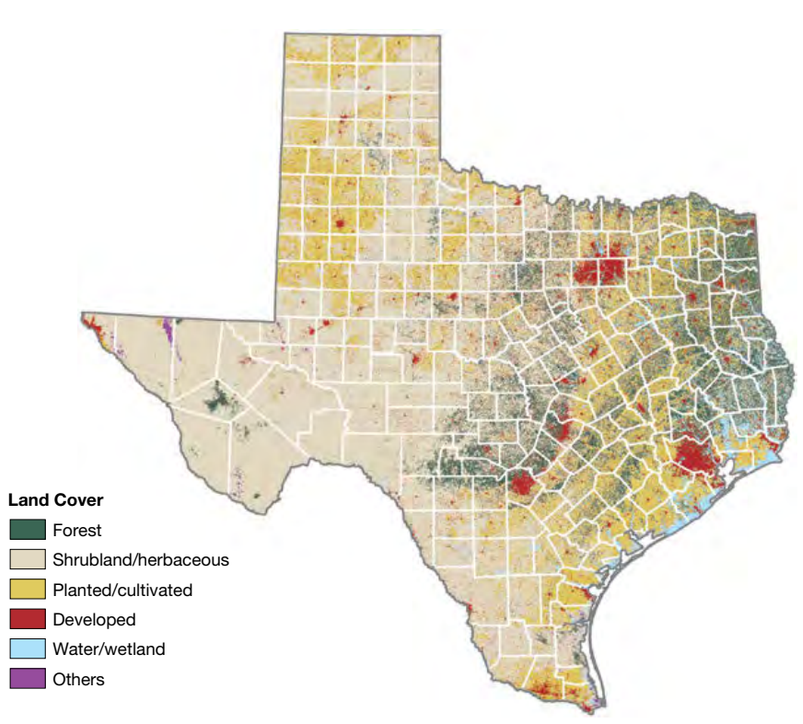


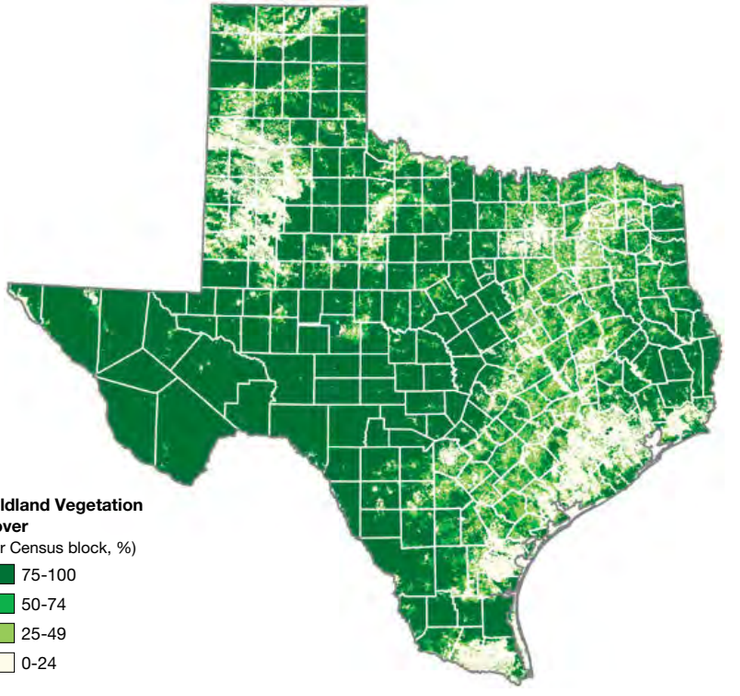
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0


Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Virginia

Southern Region

Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

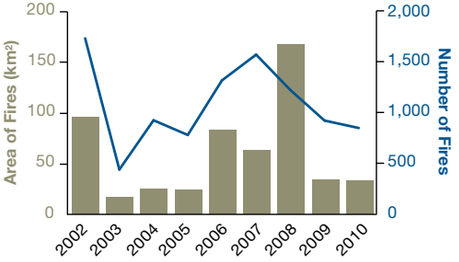
Population and Geography Overview

Census Data	Number	%
Population	8,001,024	
Housing units	3,364,939	
Seasonal use	80,468	2

Land Ownership	Area (km²)	%
Public-Federal	10,167	10
Public-State	1,509	1
Public-Local	468	0
Private	93,480	89

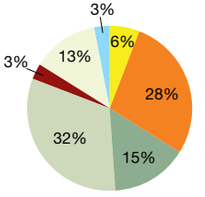
Land Cover	Area (km²)	%
Forest	60,187	57
Shrubland/herbaceous	4,651	4
Planted/cultivated	22,121	21
Developed	9,757	9
Water/wetland	8,608	8
Others	299	0
Total area	105,623	

Wildfire History

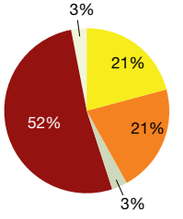


WUI in Numbers (see legend)

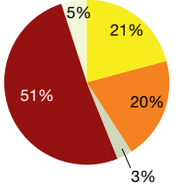
Area

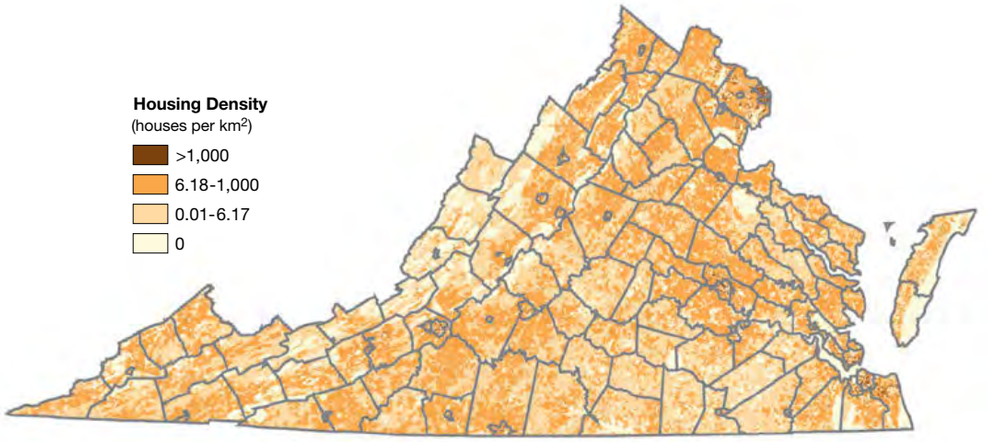


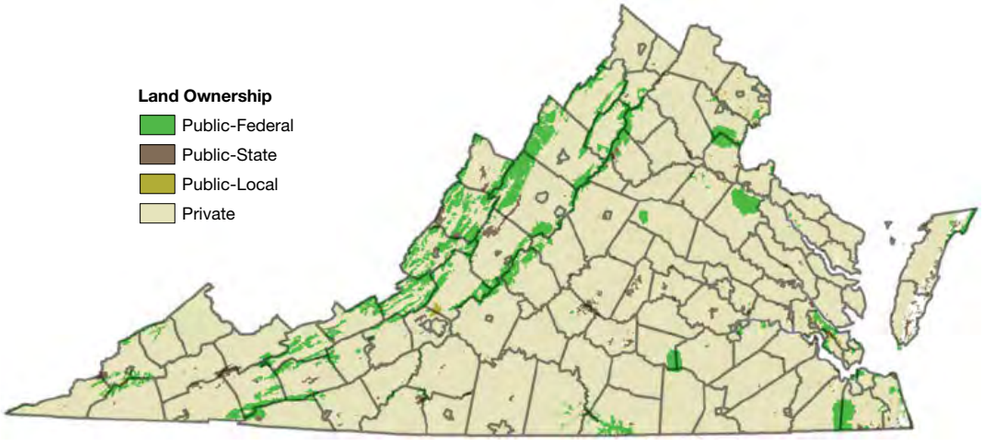
Housing Units

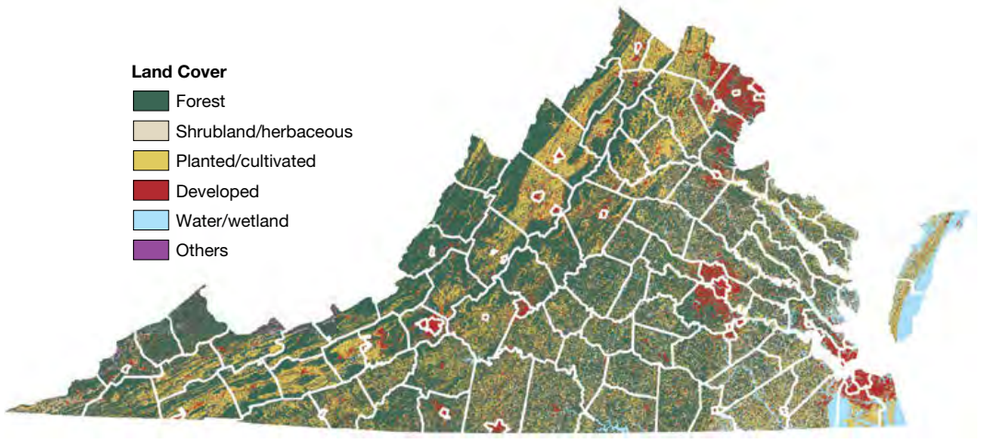


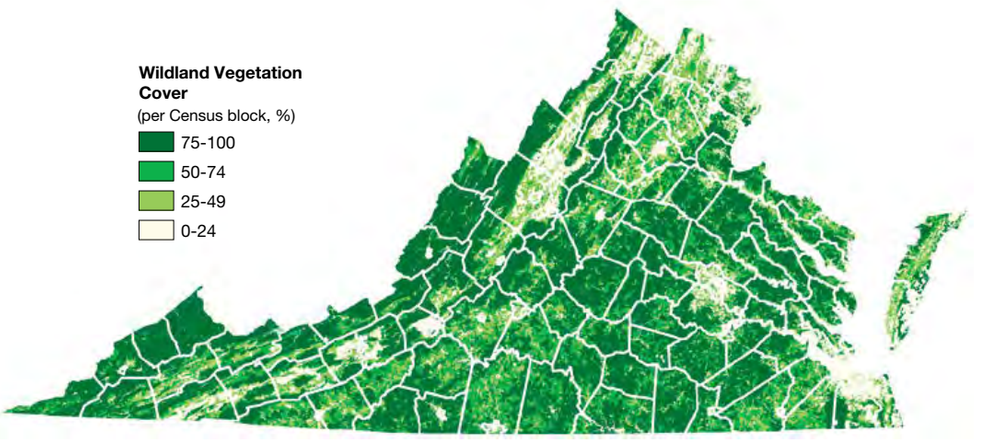
Population




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

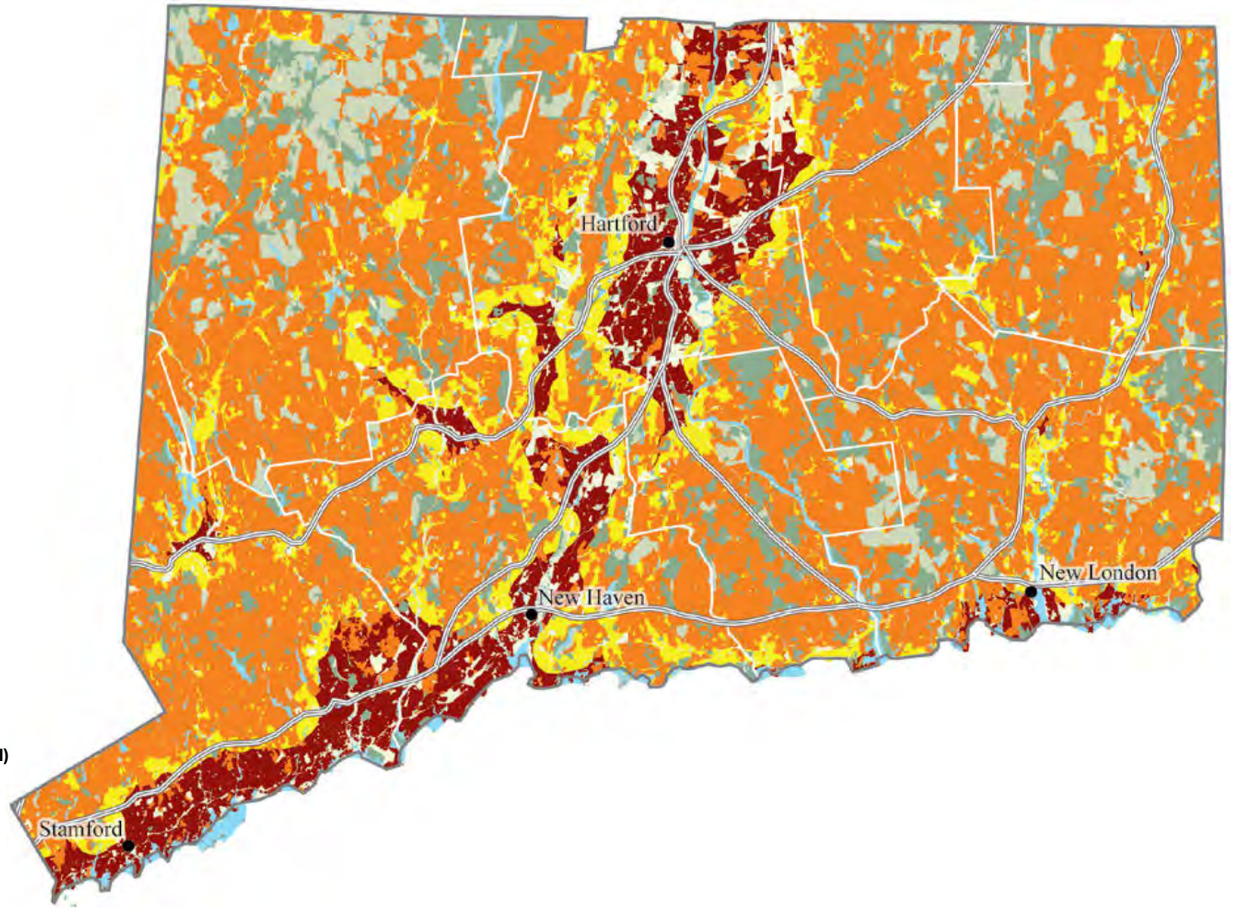

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Connecticut

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 — 25 km

For more information on the maps and data presented here, please refer to page 20.

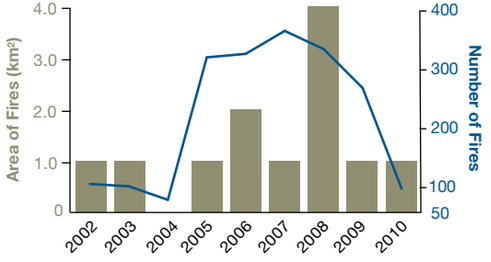
Population and Geography Overview

Census Data	Number	%
Population	3,574,097	
Housing units	1,487,891	
Seasonal use	29,618	2

Land Ownership	Area (km²)	%
Public-Federal	34	0
Public-State	946	7
Public-Local	209	2
Private	11,796	91

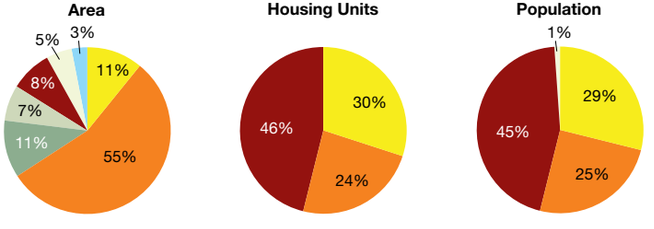
Land Cover	Area (km²)	%
Forest	7,333	56
Shrubland/herbaceous	208	2
Planted/cultivated	985	8
Developed	3,104	24
Water/wetland	1,321	10
Others	34	0
Total area	12,985	

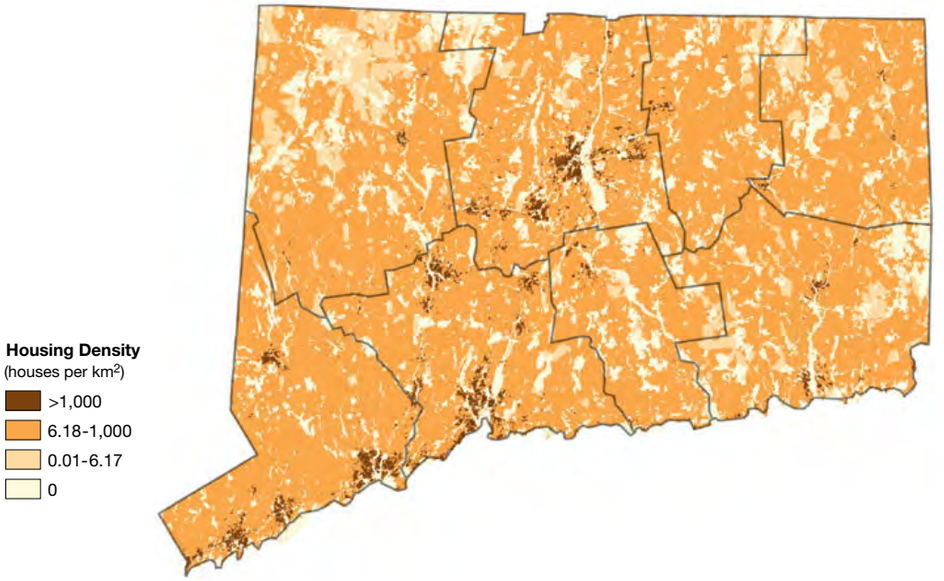
Wildfire History

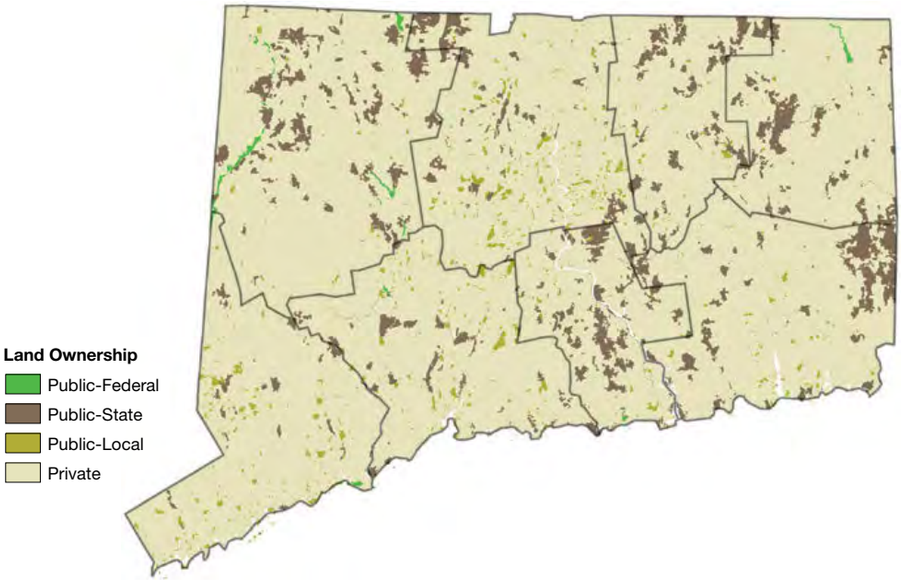


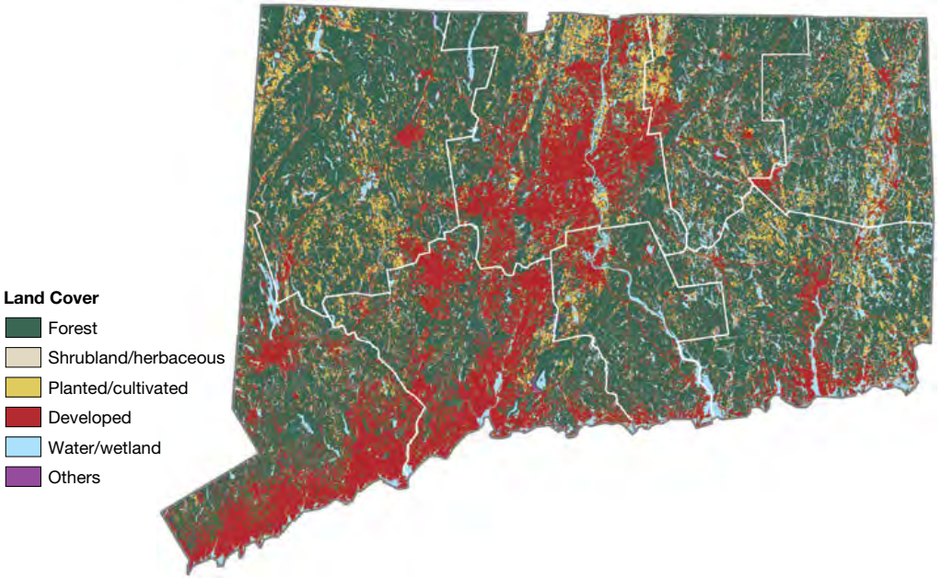
The extent of wildfires is expressed in whole numbers (km²). Therefore, years with wildfire area less than 1 km² appears to have a value of 0.

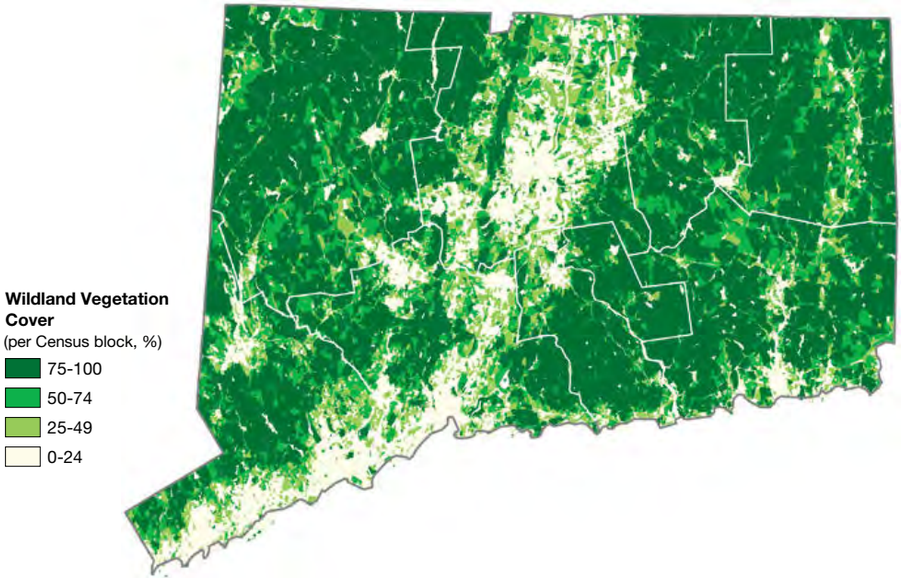
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

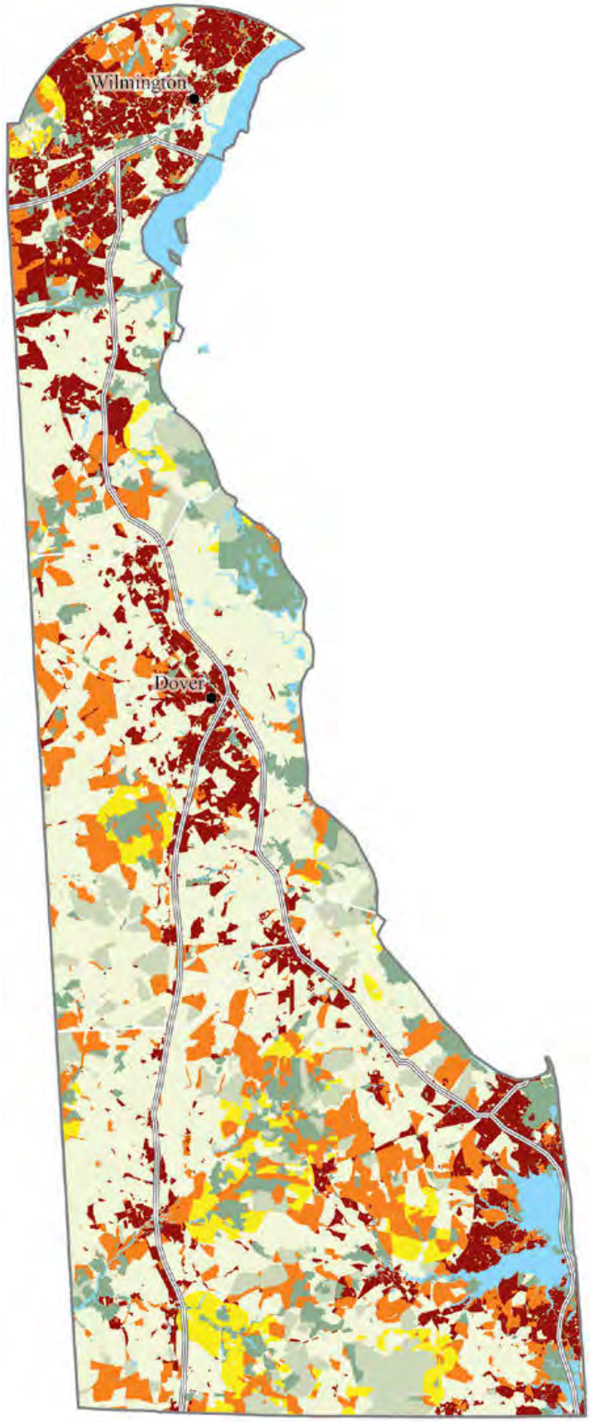

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Delaware

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 10 20 km

For more information on the maps and data presented here, please refer to page 20.

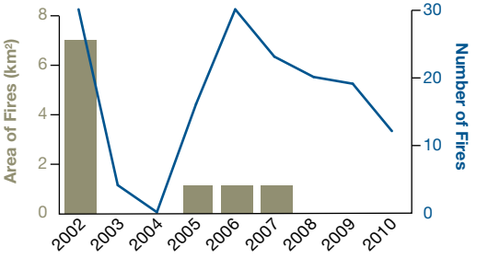
Population and Geography Overview

Census Data	Number	%
Population	897,934	
Housing units	405,885	
Seasonal use	35,939	9

Land Ownership	Area (km²)	%
Public-Federal	74	1
Public-State	388	7
Public-Local	102	2
Private	4,720	89

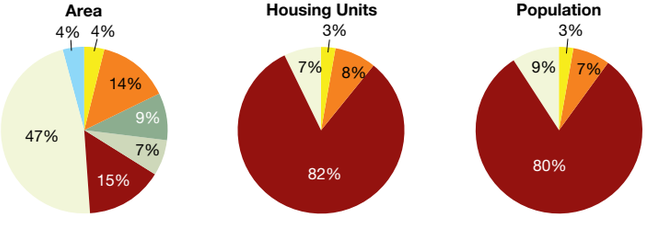
Land Cover	Area (km²)	%
Forest	791	15
Shrubland/herbaceous	130	2
Planted/cultivated	2,189	41
Developed	883	17
Water/wetland	1,270	24
Others	22	0
Total area	5,283	

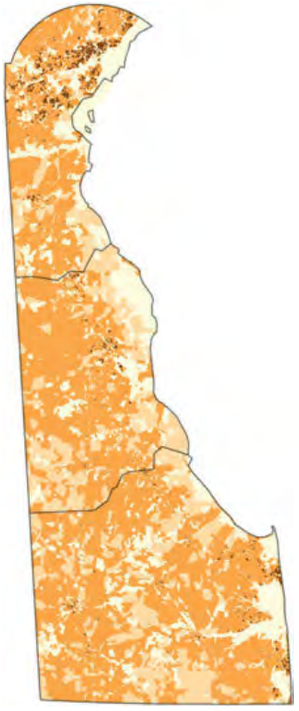
Wildfire History



The extent of wildfires is expressed in whole numbers (km²). Therefore, years with wildfire area less than 1 km² appears to have a value of 0.

WUI in Numbers (see legend)





Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0

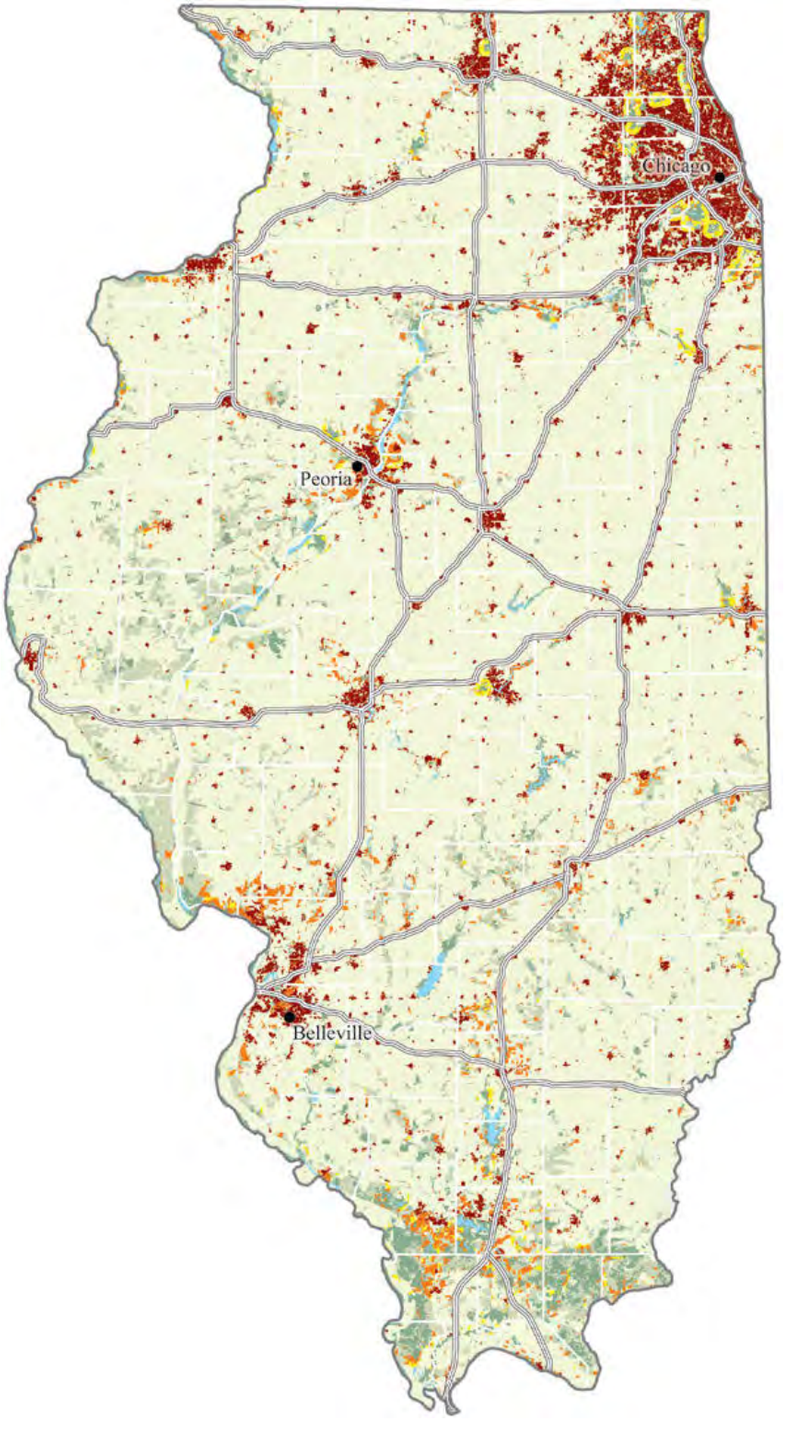
Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private

Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others

Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

Illinois

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

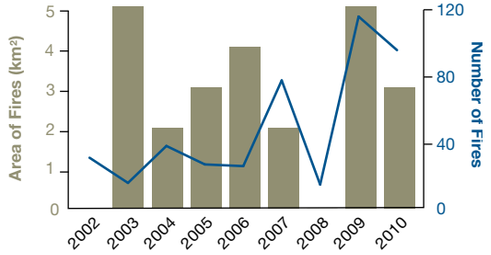
Population and Geography Overview

Census Data	Number	%
Population	12,830,632	
Housing units	5,296,715	
Seasonal use	47,289	1

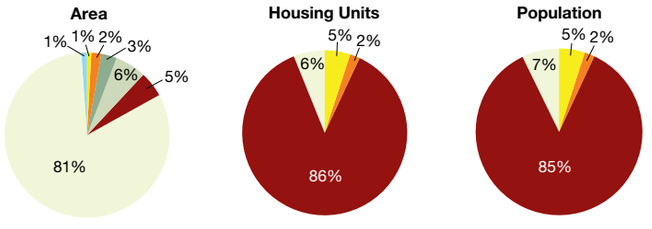
Land Ownership	Area (km²)	%
Public-Federal	1,791	1
Public-State	1,671	1
Public-Local	550	0
Private	141,906	97

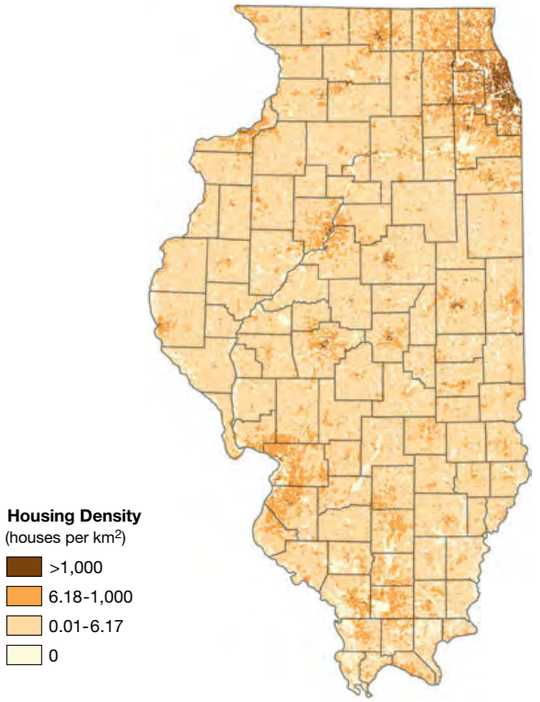
Land Cover	Area (km²)	%
Forest	21,901	15
Shrubland/herbaceous	1,032	1
Planted/cultivated	100,752	69
Developed	17,277	12
Water/wetland	4,846	3
Others	109	0
Total area	145,918	

Wildfire History

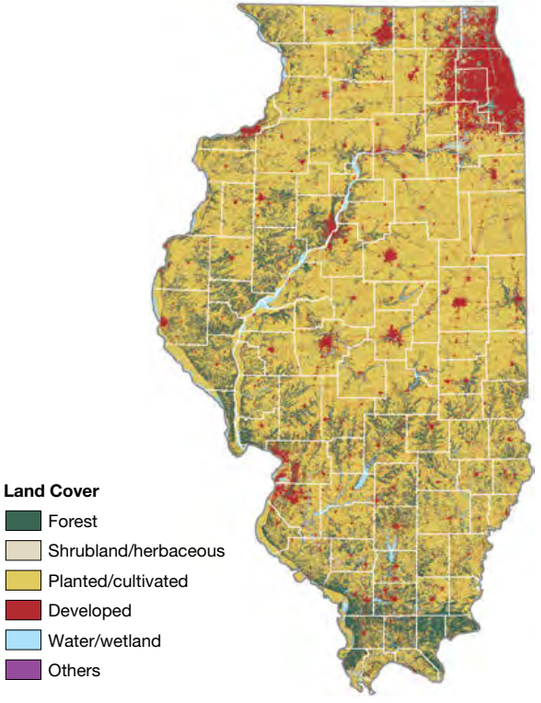


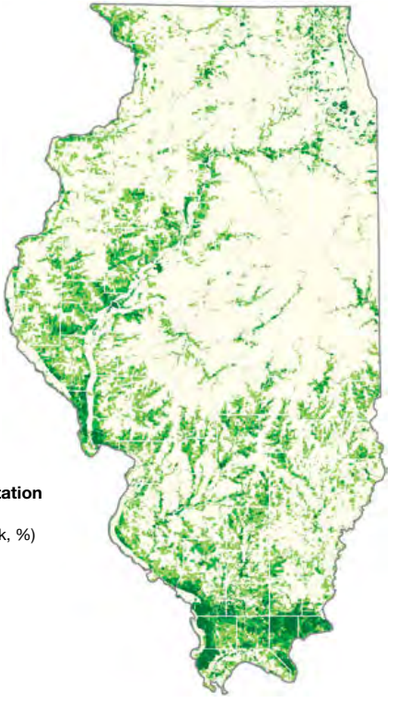
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

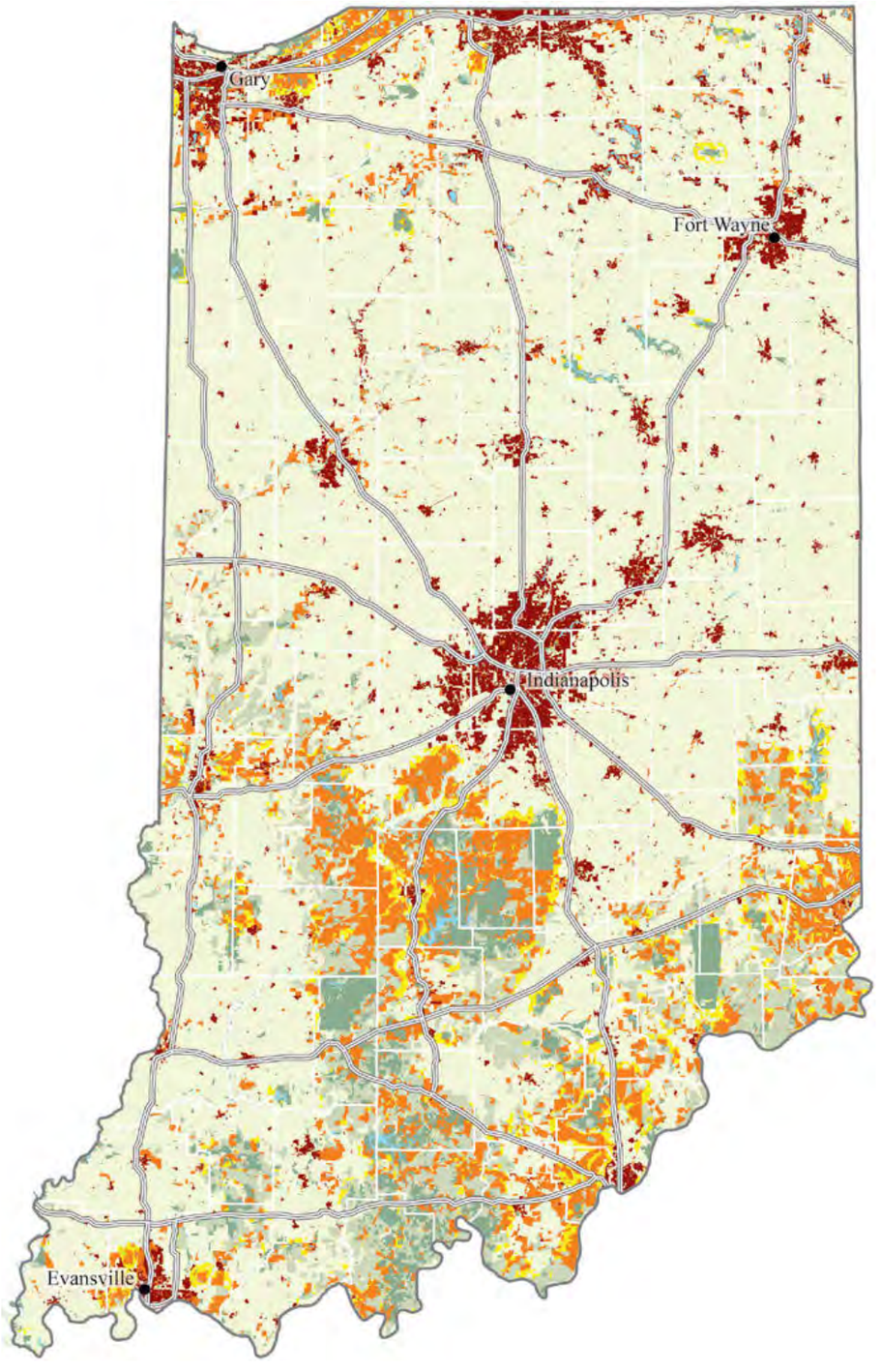

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Indiana

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

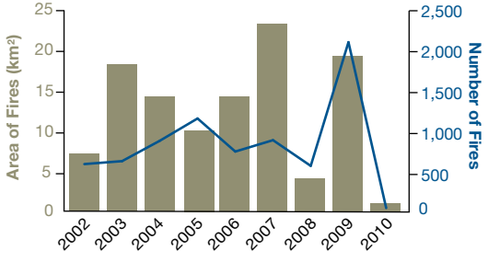
Population and Geography Overview

Census Data	Number	%
Population	6,483,802	
Housing units	2,795,541	
Seasonal use	45,571	2

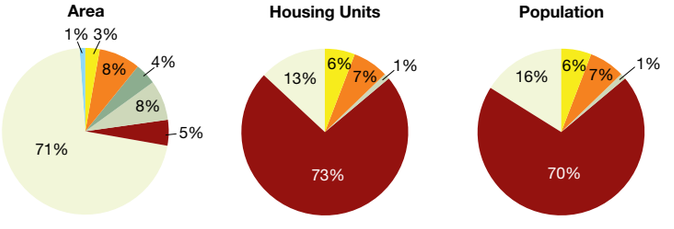
Land Ownership	Area (km²)	%
Public-Federal	2,062	2
Public-State	1,597	2
Public-Local	130	0
Private	89,935	96

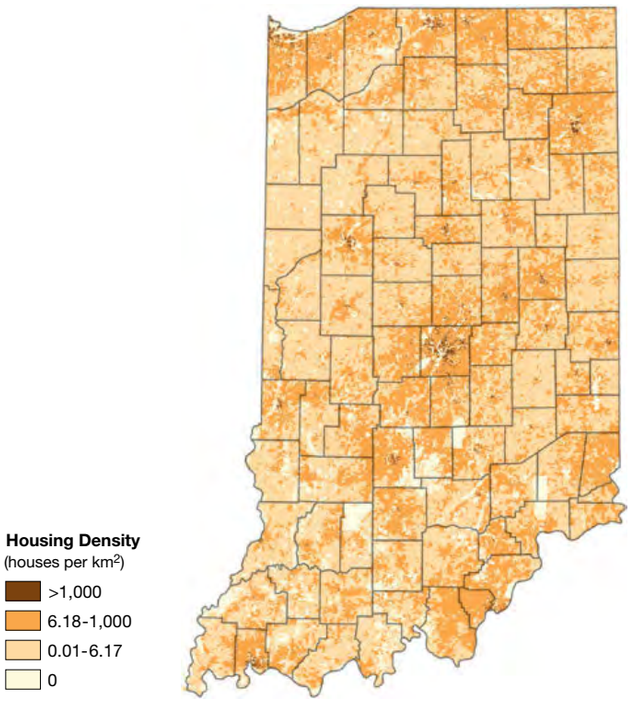
Land Cover	Area (km²)	%
Forest	21,188	23
Shrubland/herbaceous	1,756	2
Planted/cultivated	58,264	62
Developed	9,965	11
Water/wetland	2,477	3
Others	74	0
Total area	93,724	

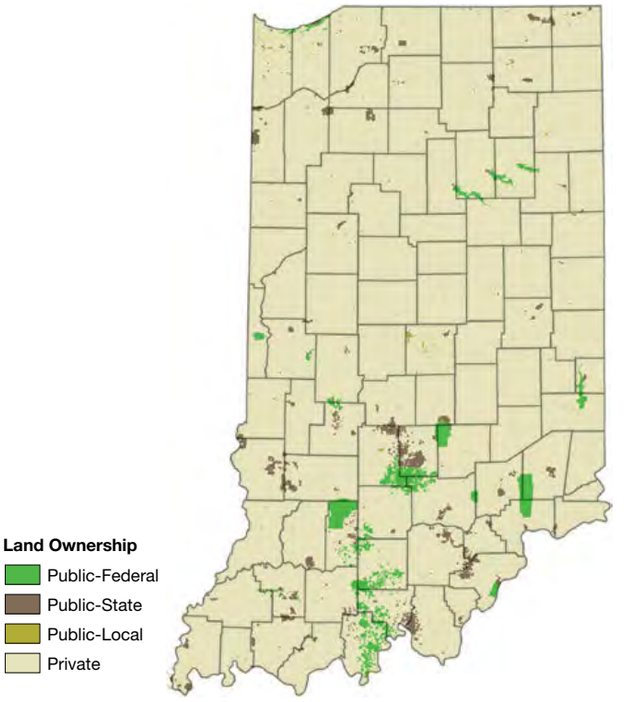
Wildfire History

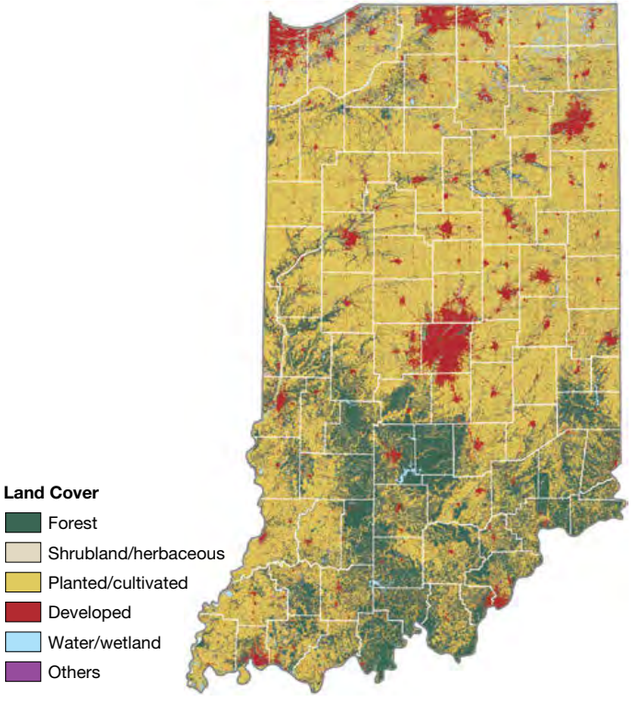


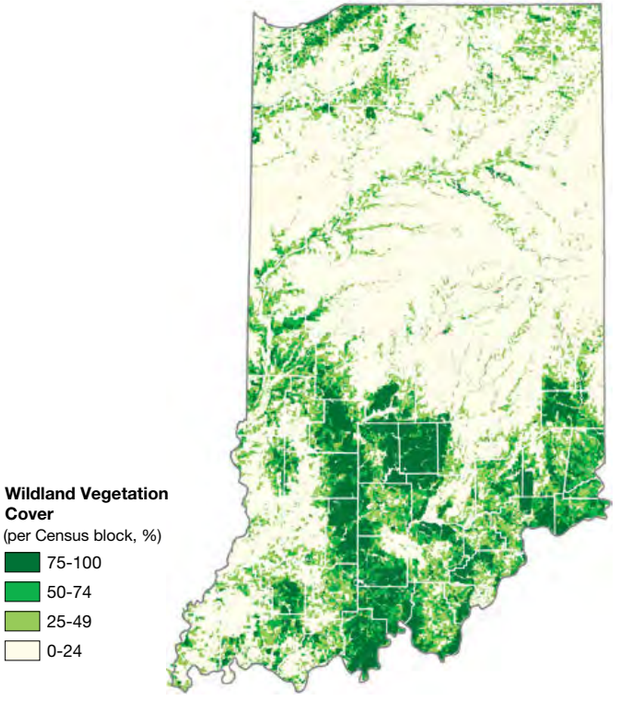
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

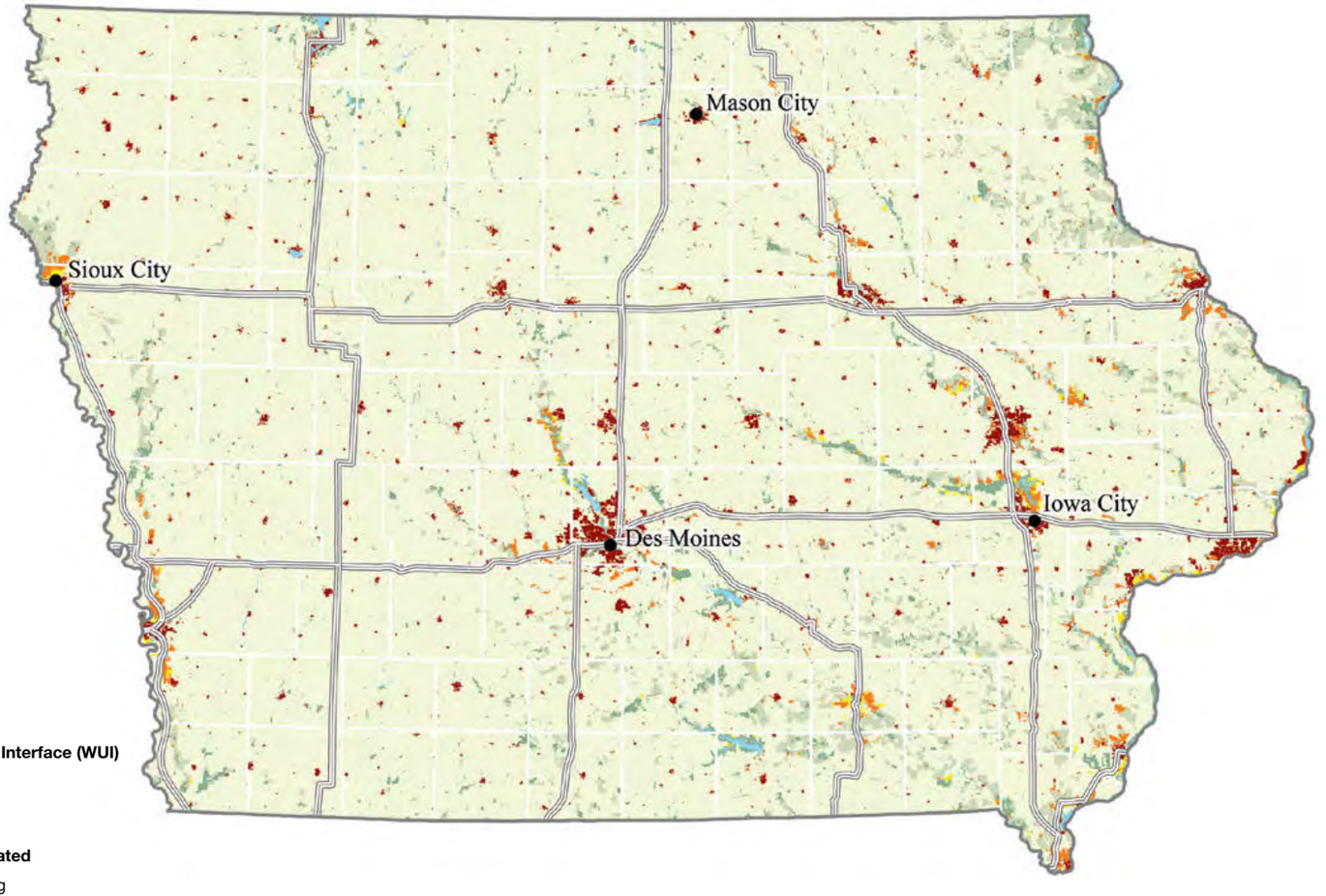

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Iowa

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

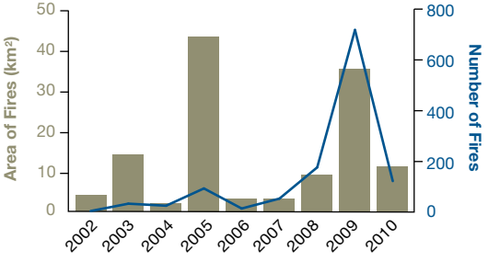
Population and Geography Overview

Census Data	Number	%
Population	3,046,355	
Housing units	1,336,417	
Seasonal use	21,020	2

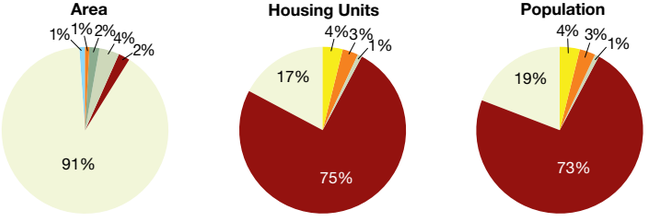
Land Ownership	Area (km²)	%
Public-Federal	1,257	1
Public-State	1,414	1
Public-Local	576	0
Private	142,498	98

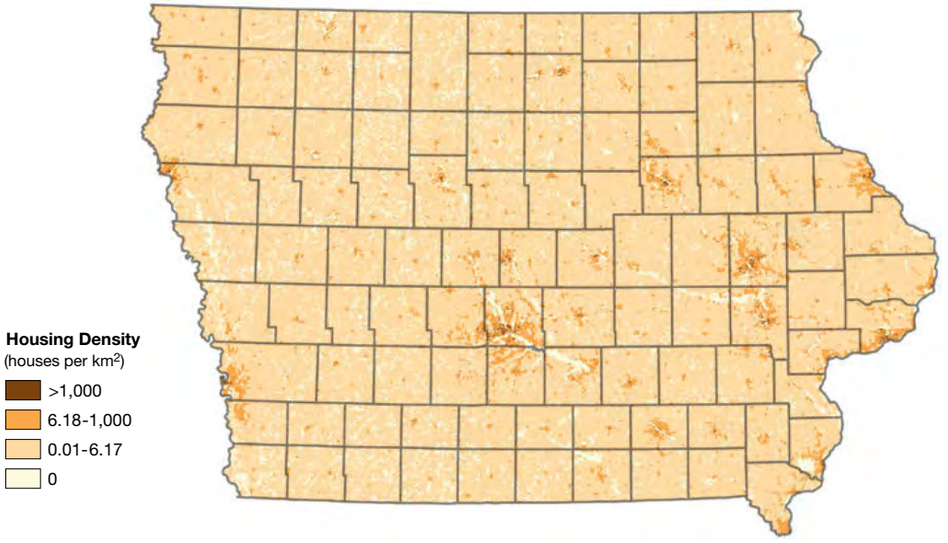
Land Cover	Area (km²)	%
Forest	10,063	7
Shrubland/herbaceous	7,063	5
Planted/cultivated	113,641	78
Developed	10,811	7
Water/wetland	4,105	3
Others	62	0
Total area	145,746	

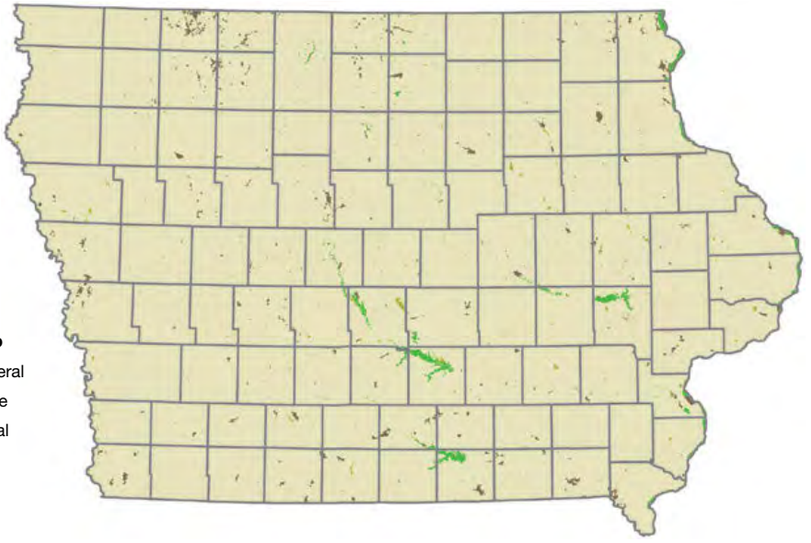
Wildfire History

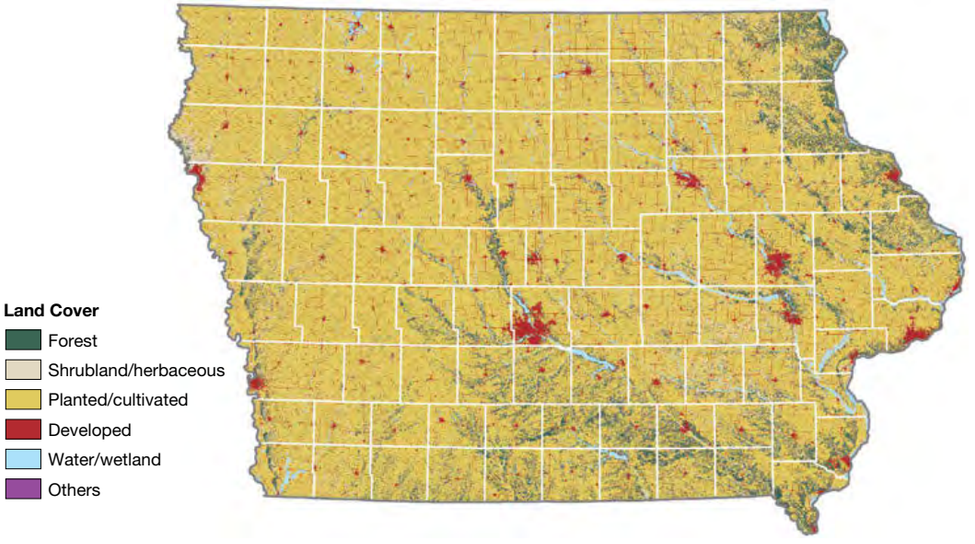


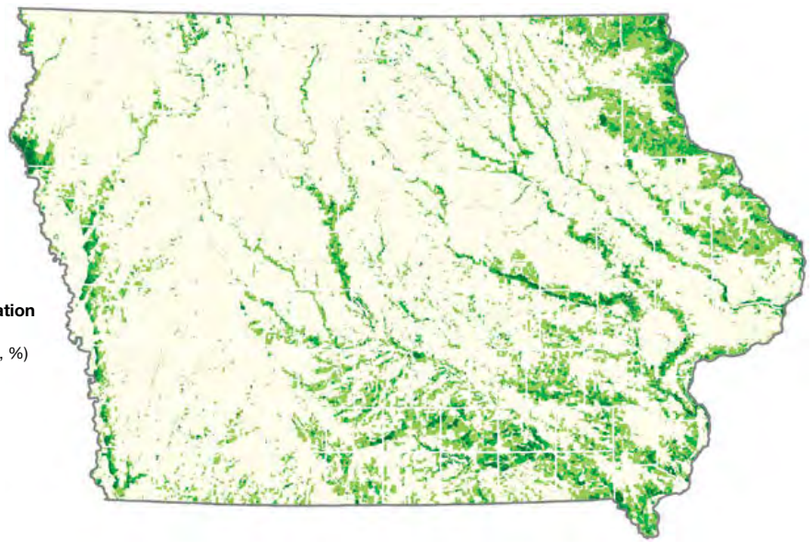
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

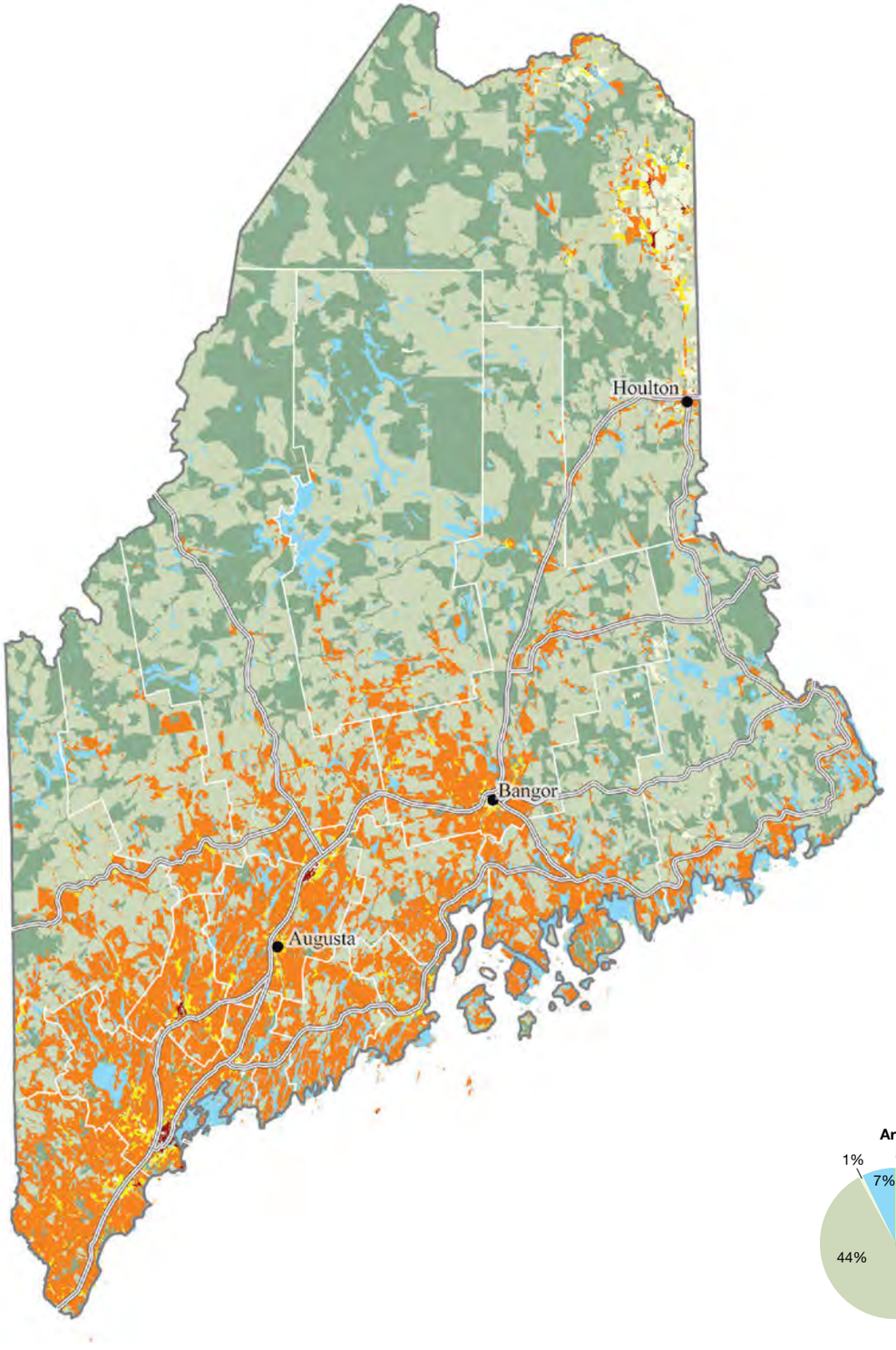

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Maine

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

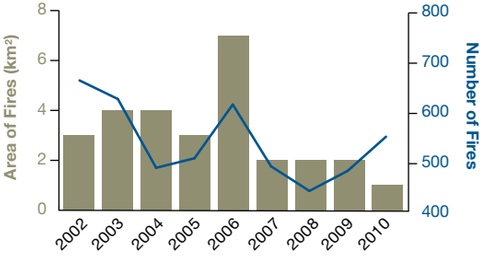
Population and Geography Overview

Census Data	Number	%
Population	1,328,361	
Housing units	721,830	
Seasonal use	118,310	16

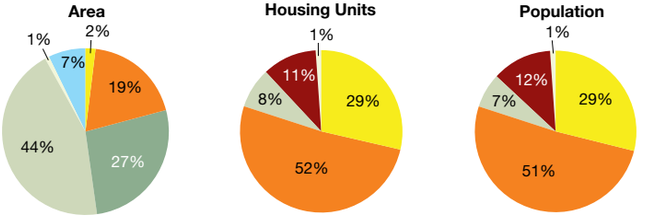
Land Ownership	Area (km²)	%
Public-Federal	773	1
Public-State	3,863	4
Public-Local	118	0
Private	81,121	94

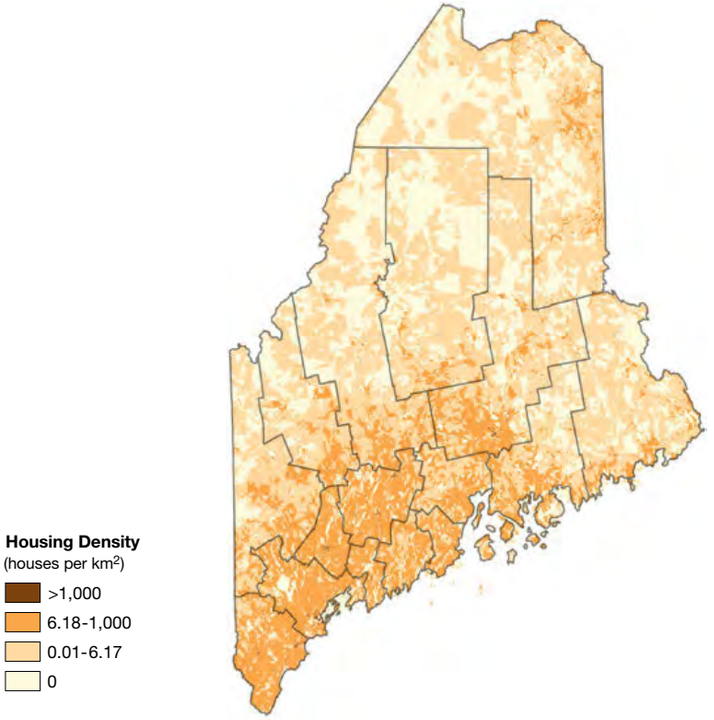
Land Cover	Area (km²)	%
Forest	58,311	68
Shrubland/herbaceous	7,510	9
Planted/cultivated	3,166	4
Developed	2,926	3
Water/wetland	13,471	16
Others	492	1
Total area	85,876	

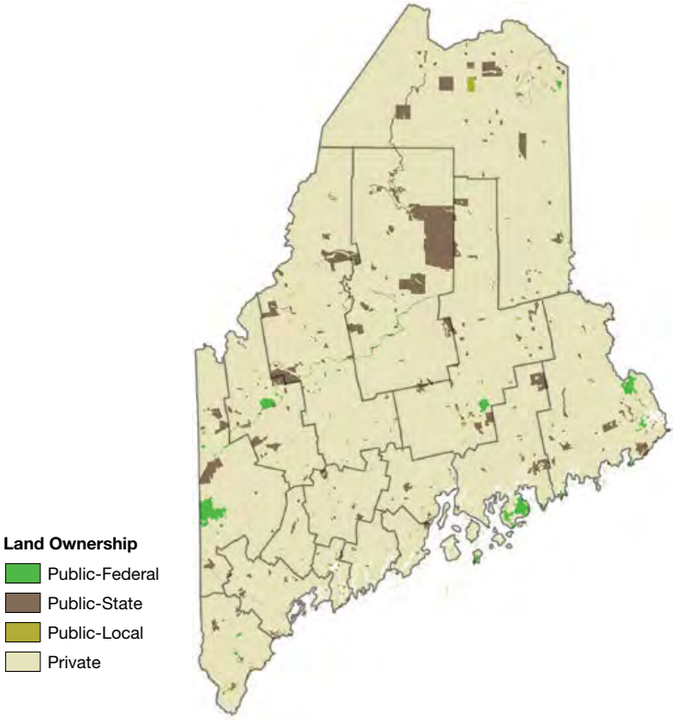
Wildfire History

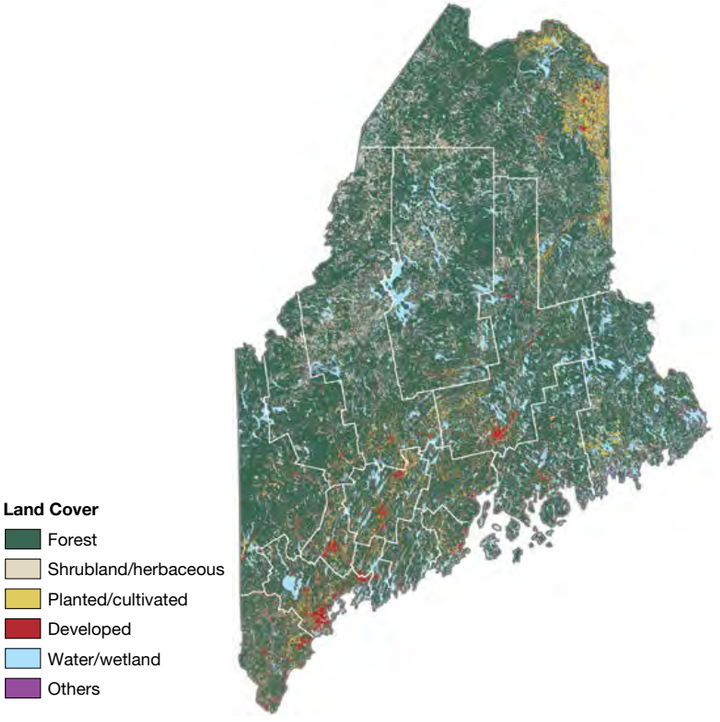


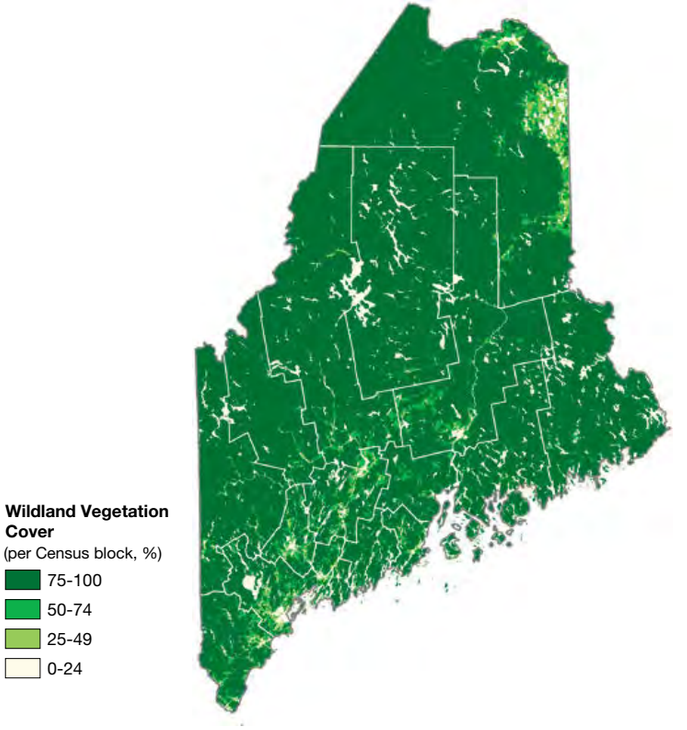
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

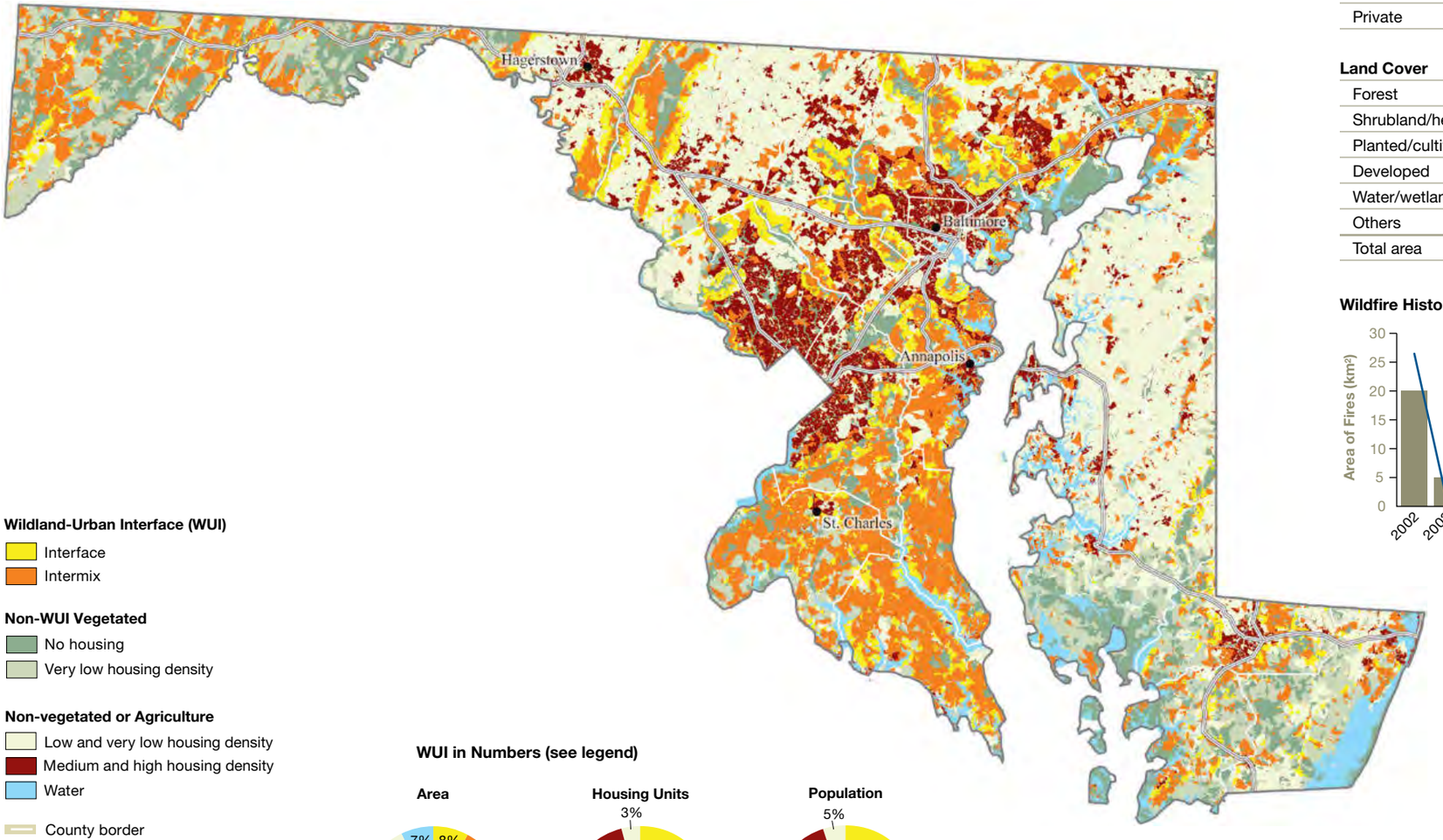

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Maryland

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

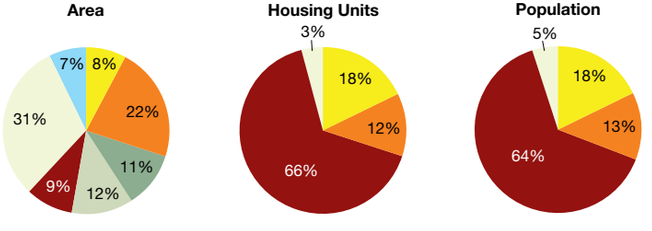
- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 25 50 km

For more information on the maps and data presented here, please refer to page 20.

WUI in Numbers (see legend)



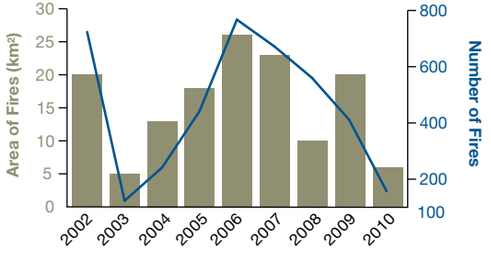
Population and Geography Overview

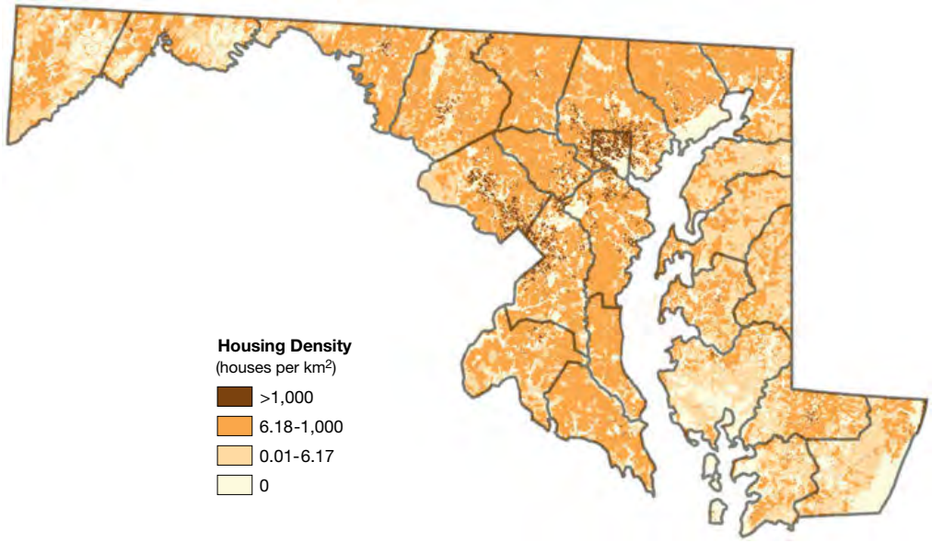
Census Data	Number	%
Population	5,773,552	
Housing units	2,378,814	
Seasonal use	55,786	2

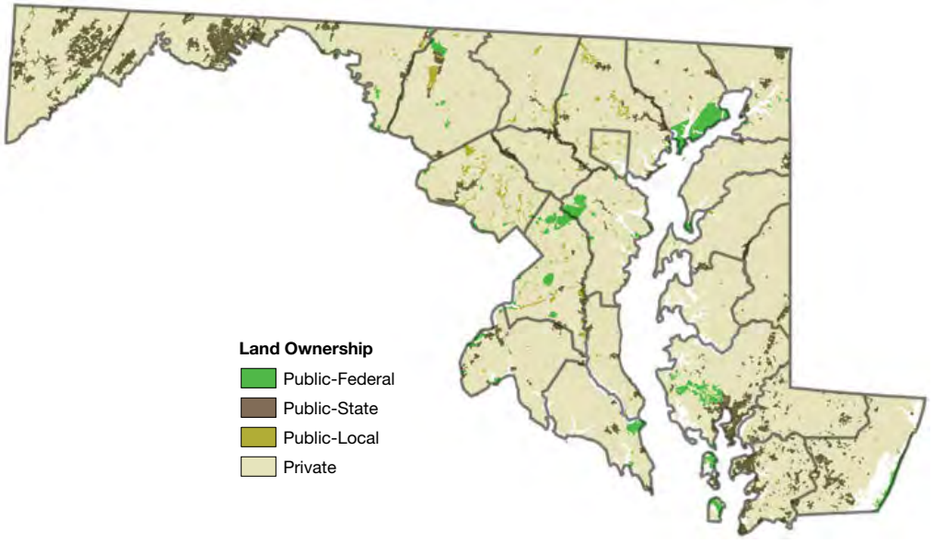
Land Ownership	Area (km²)	%
Public-Federal	722	3
Public-State	1,847	7
Public-Local	515	2
Private	24,049	89

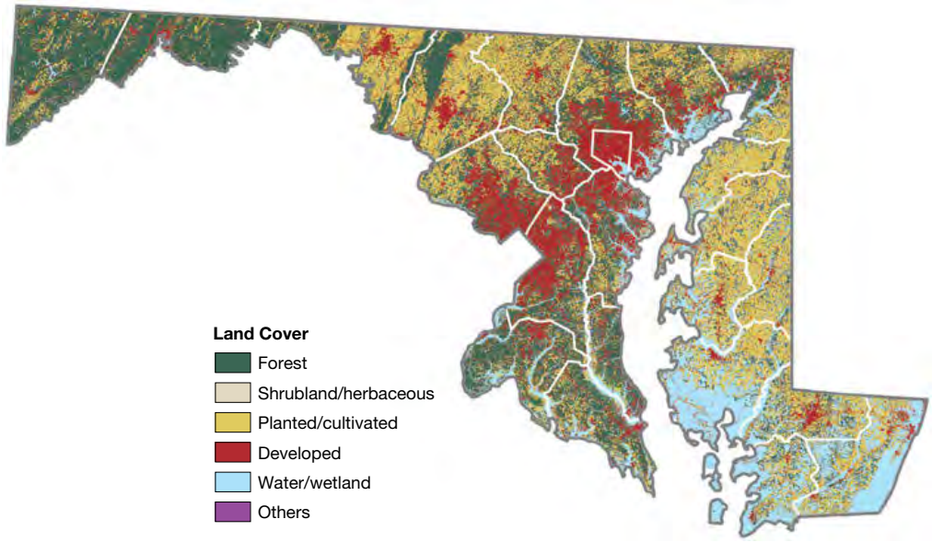
Land Cover	Area (km²)	%
Forest	8,537	31
Shrubland/herbaceous	519	2
Planted/cultivated	8,124	30
Developed	4,547	17
Water/wetland	5,296	20
Others	110	0
Total area	27,133	

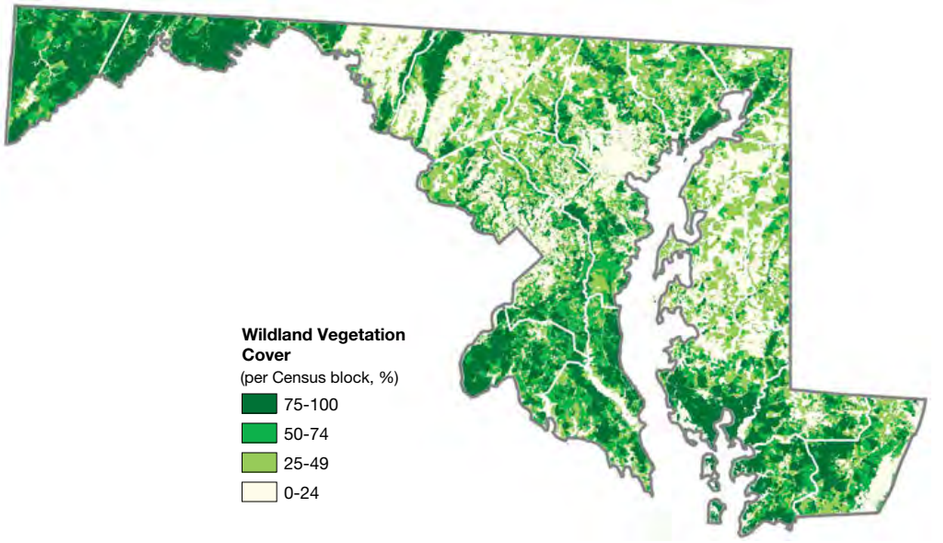
Wildfire History




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

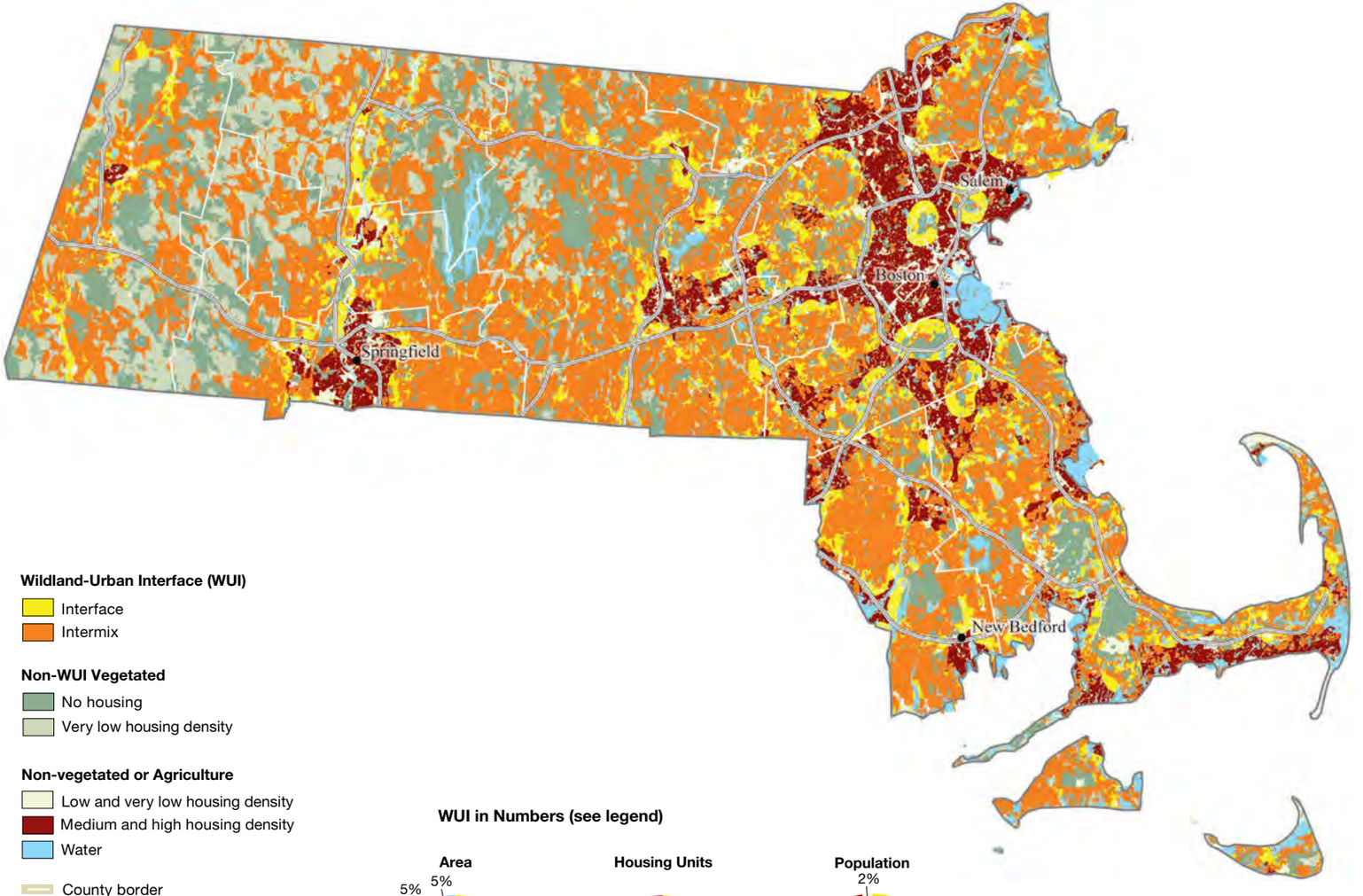

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Massachusetts

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

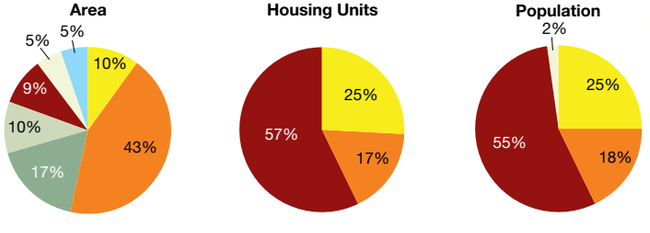
- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 25 50 km

For more information on the maps and data presented here, please refer to page 20.

WUI in Numbers (see legend)



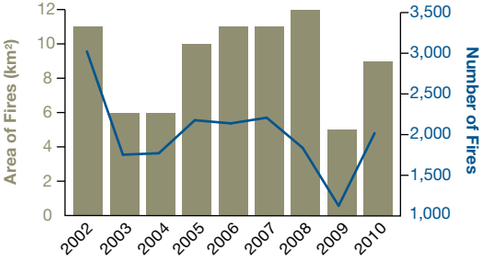
Population and Geography Overview

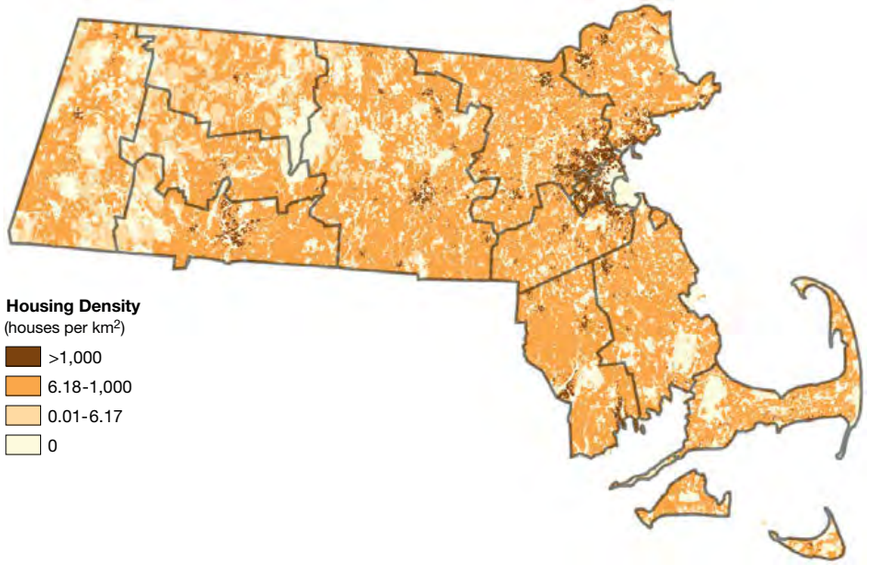
Census Data	Number	%
Population	6,547,629	
Housing units	2,808,254	
Seasonal use	115,630	4

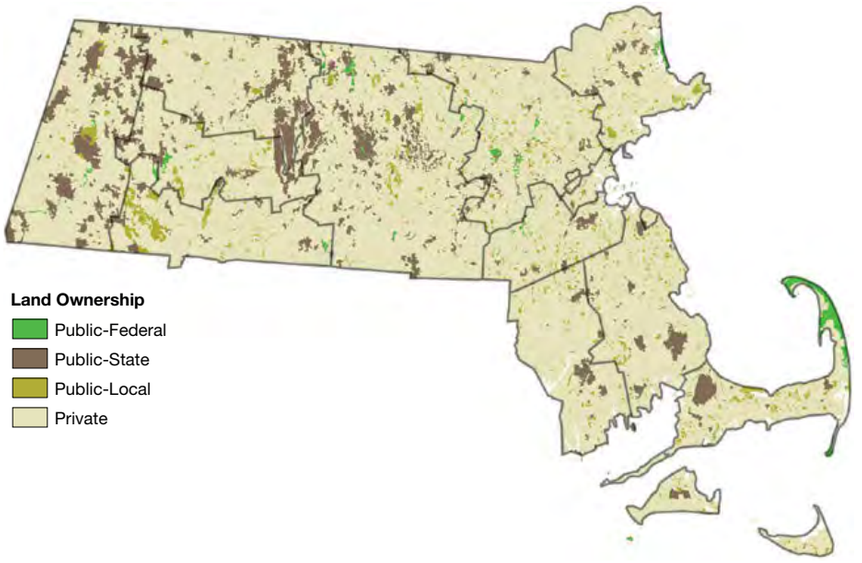
Land Ownership	Area (km²)	%
Public-Federal	245	1
Public-State	2,220	10
Public-Local	1,049	5
Private	17,946	84

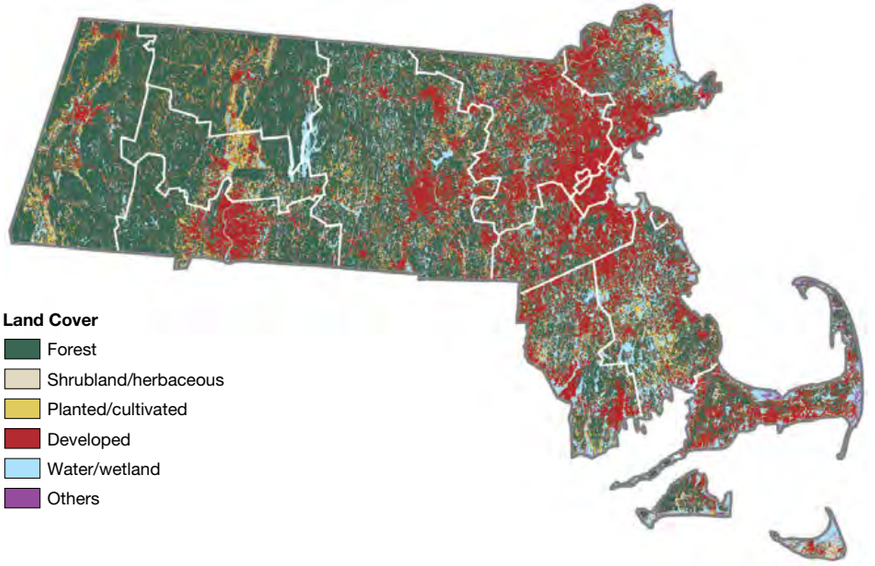
Land Cover	Area (km²)	%
Forest	11,041	51
Shrubland/herbaceous	386	2
Planted/cultivated	1,319	6
Developed	5,250	24
Water/wetland	3,254	15
Others	211	1
Total area	21,460	

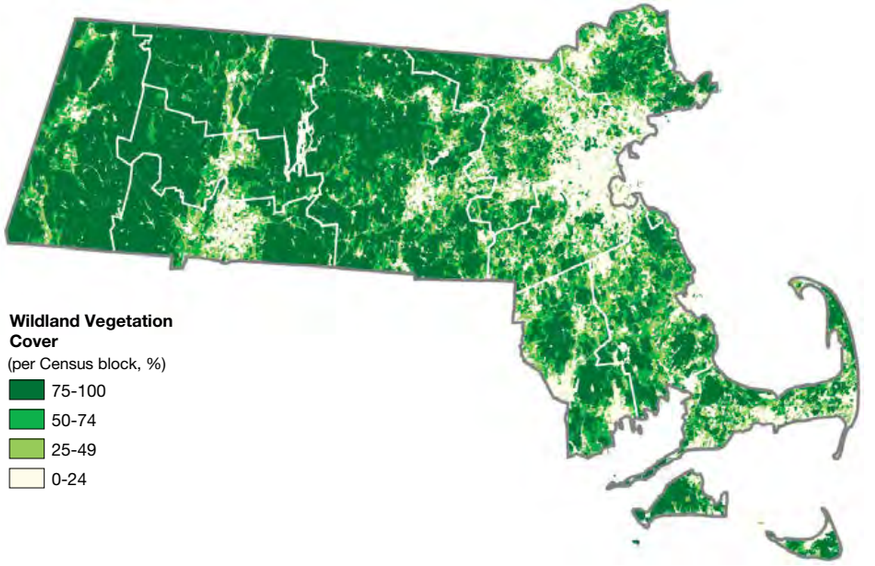
Wildfire History




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

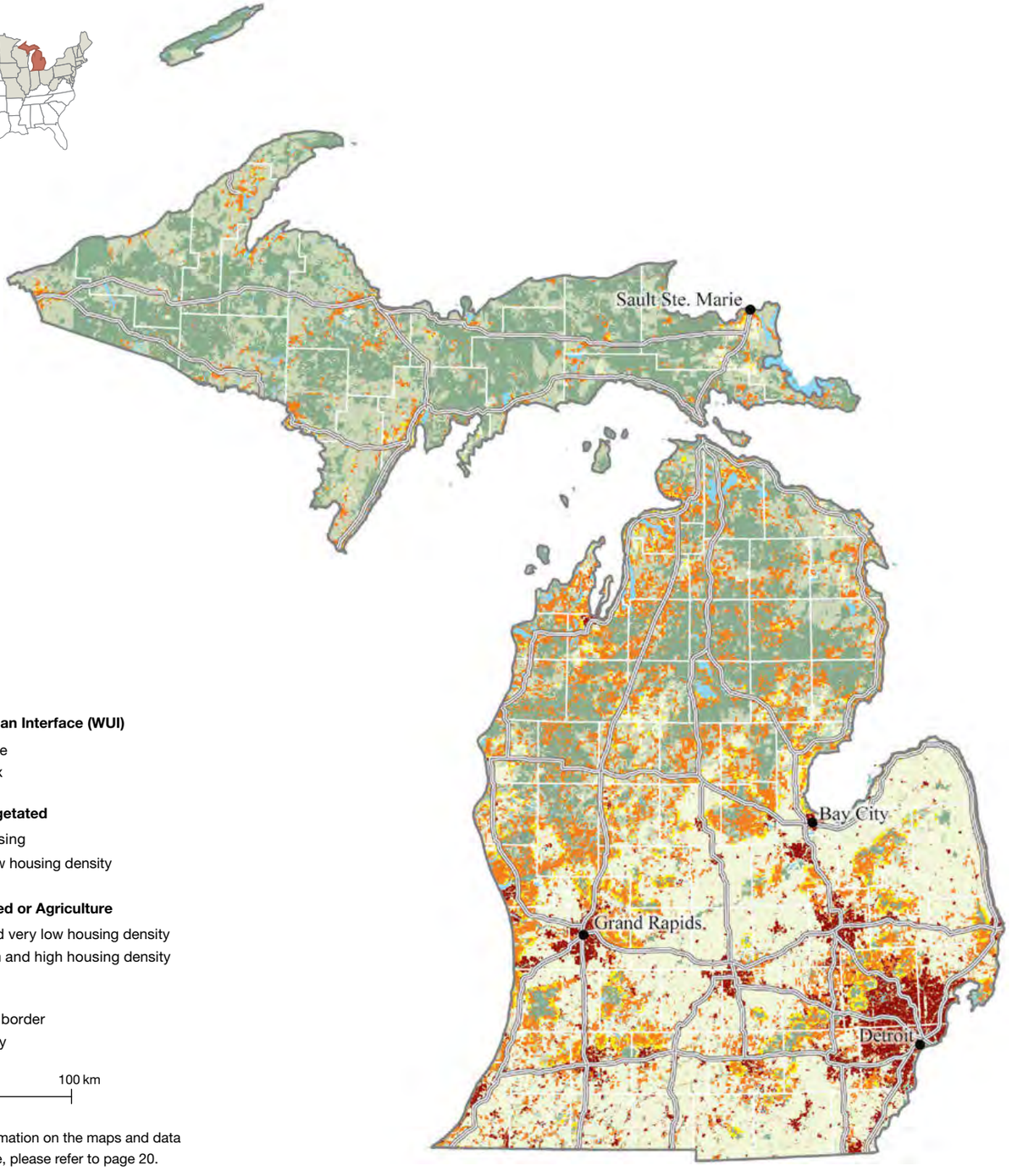

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Michigan

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

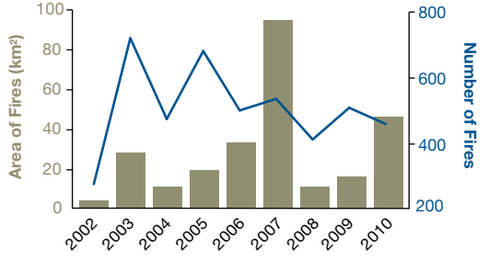
Population and Geography Overview

Census Data	Number	%
Population	9,883,640	
Housing units	4,532,233	
Seasonal use	263,071	6

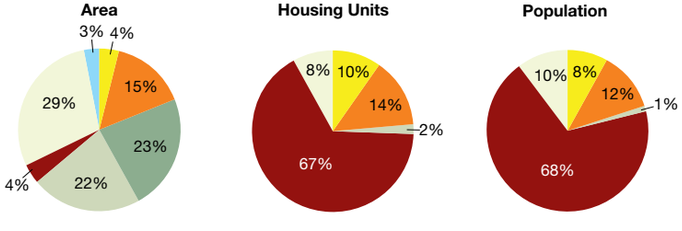
Land Ownership	Area (km²)	%
Public-Federal	13,129	9
Public-State	18,847	12
Public-Local	2	0
Private	119,650	79

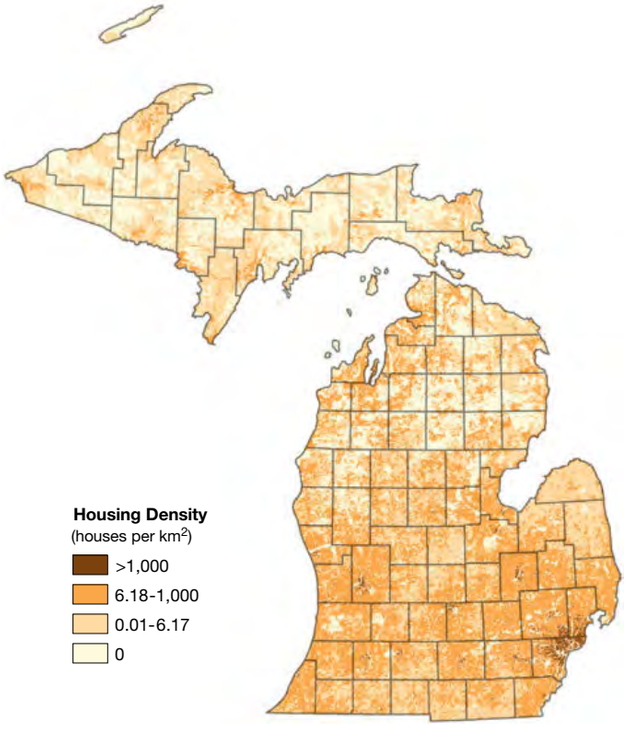
Land Cover	Area (km²)	%
Forest	54,551	36
Shrubland/herbaceous	7,653	5
Planted/cultivated	39,380	26
Developed	15,919	10
Water/wetland	33,428	22
Others	697	0
Total area	151,628	

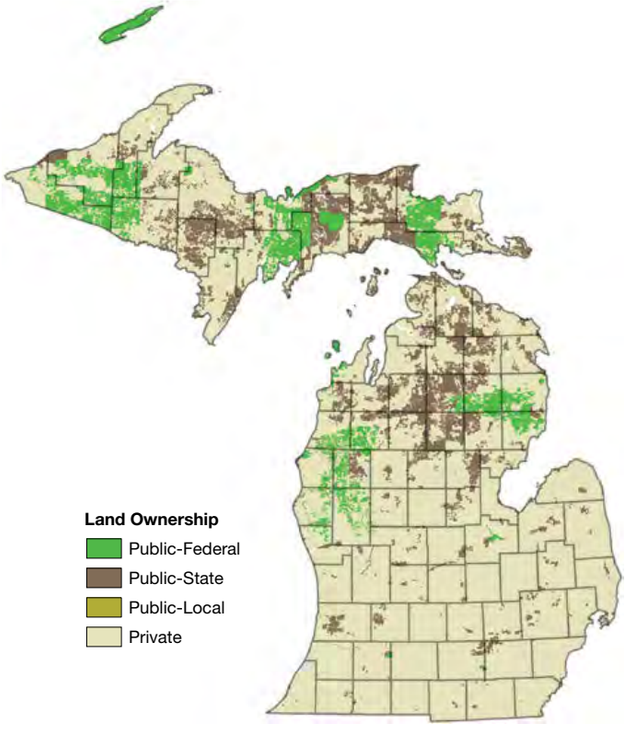
Wildfire History

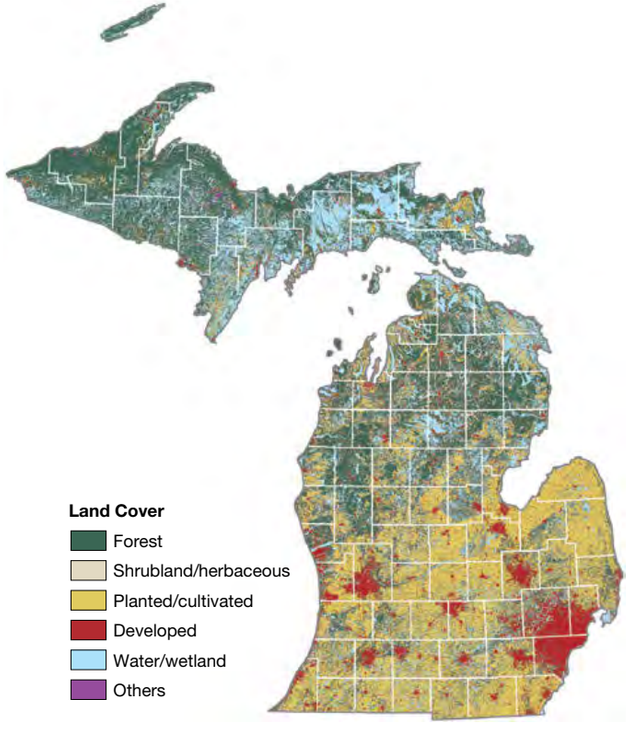


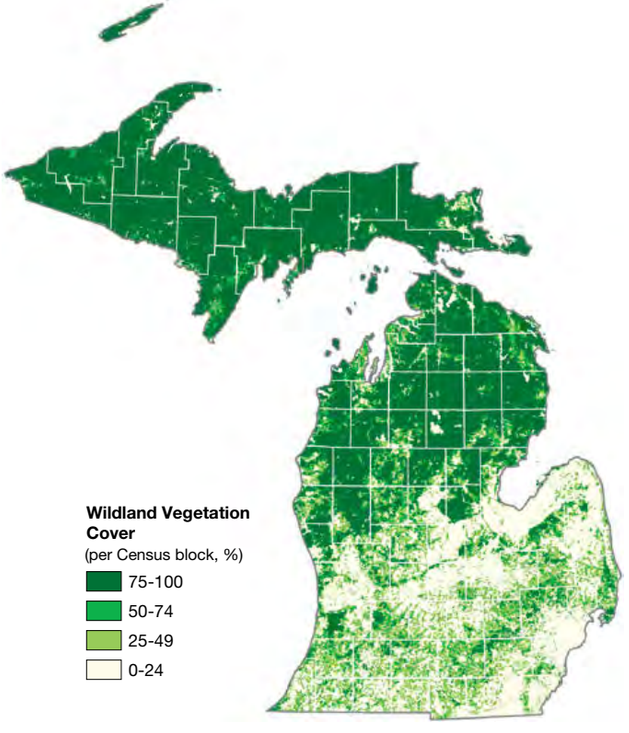
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

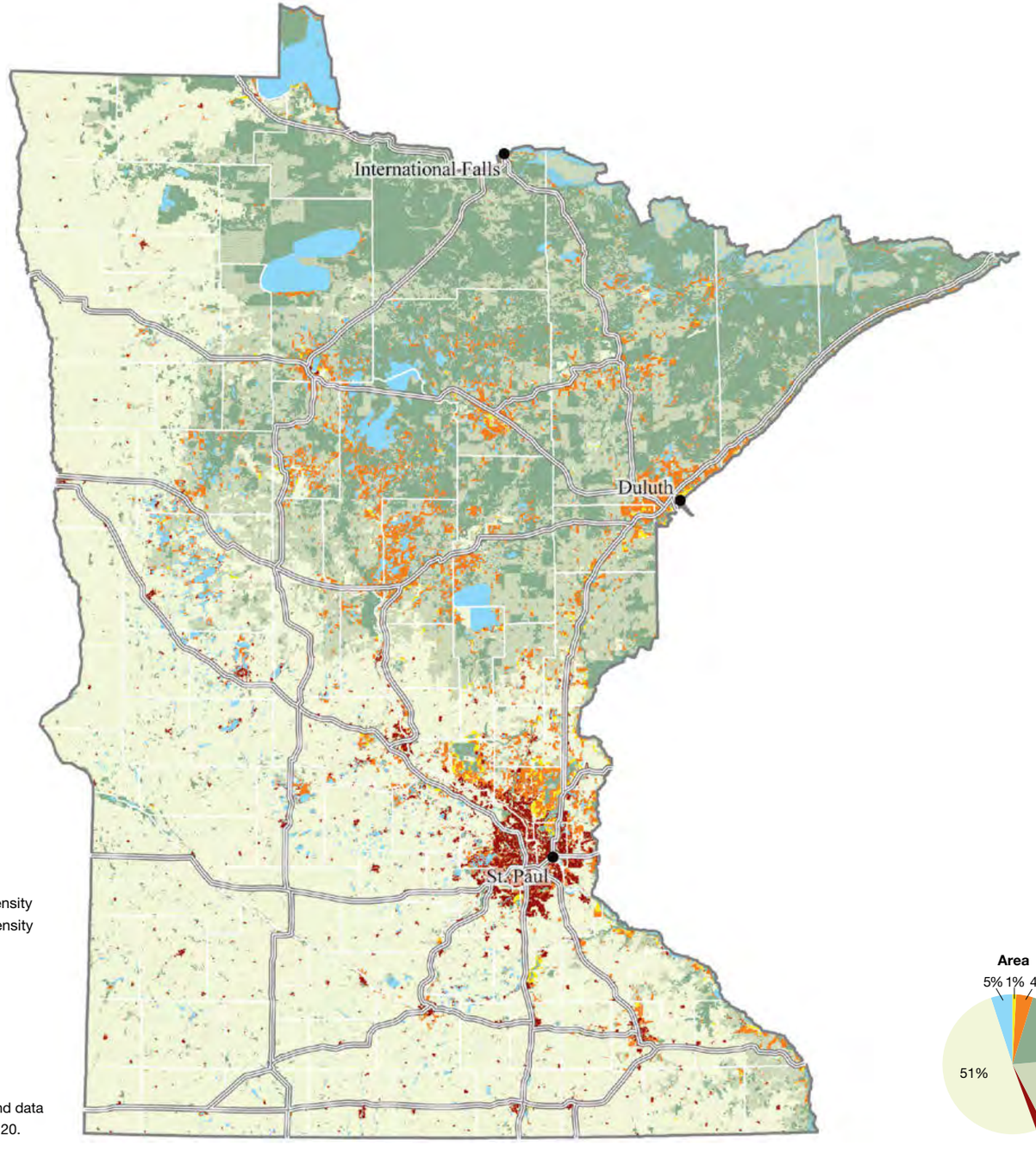

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Minnesota

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

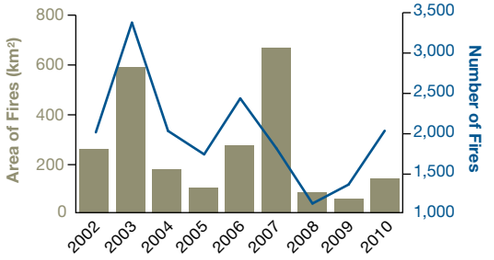
Population and Geography Overview

Census Data	Number	%
Population	5,303,925	
Housing units	2,347,201	
Seasonal use	130,471	6

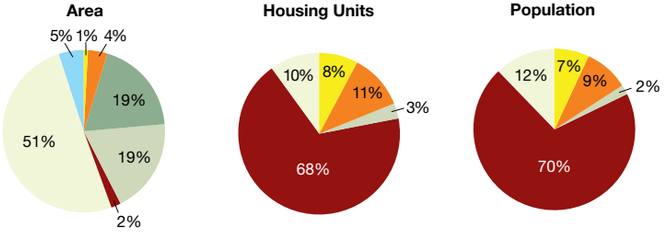
Land Ownership	Area (km²)	%
Public-Federal	15,669	7
Public-State	29,356	13
Public-Local	598	0
Private	172,944	79

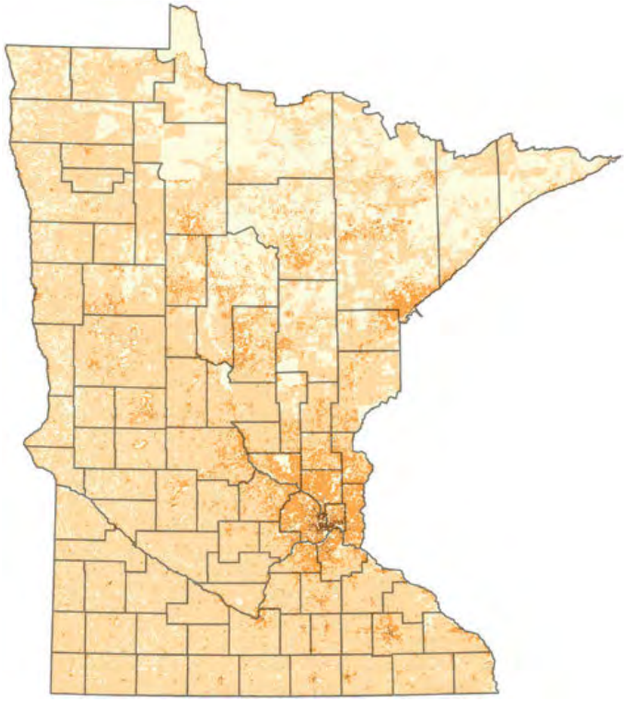
Land Cover	Area (km²)	%
Forest	44,204	20
Shrubland/herbaceous	9,350	4
Planted/cultivated	97,931	45
Developed	11,747	5
Water/wetland	55,026	25
Others	308	0
Total area	218,567	

Wildfire History

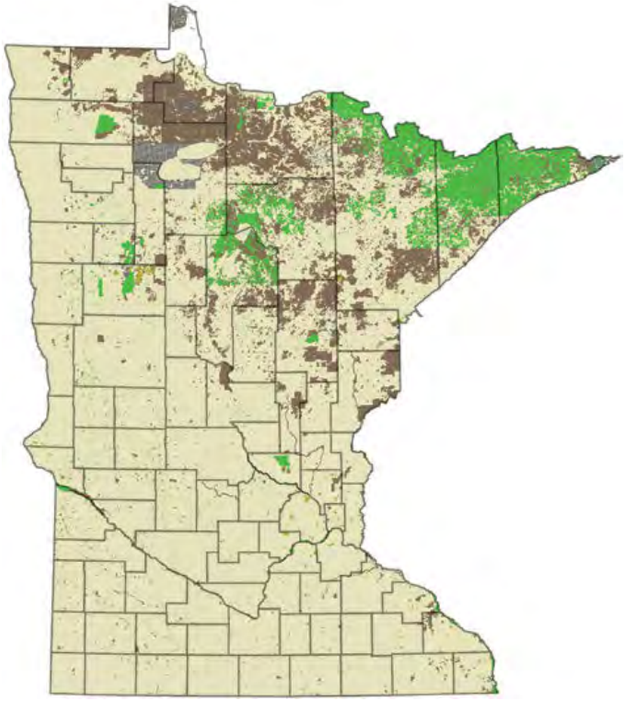


WUI in Numbers (see legend)

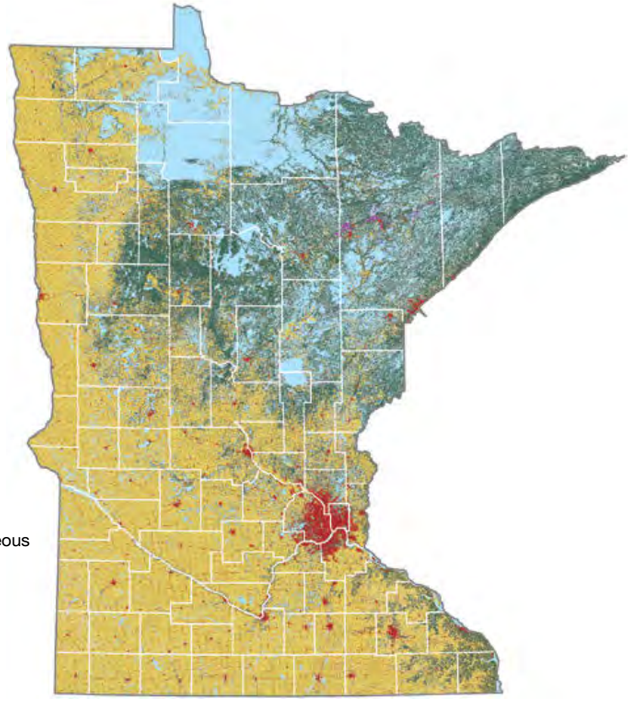




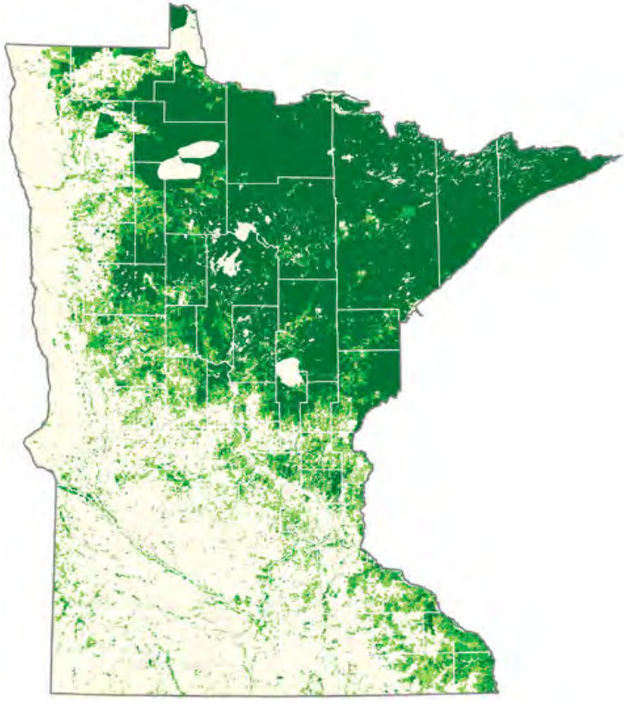
Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private



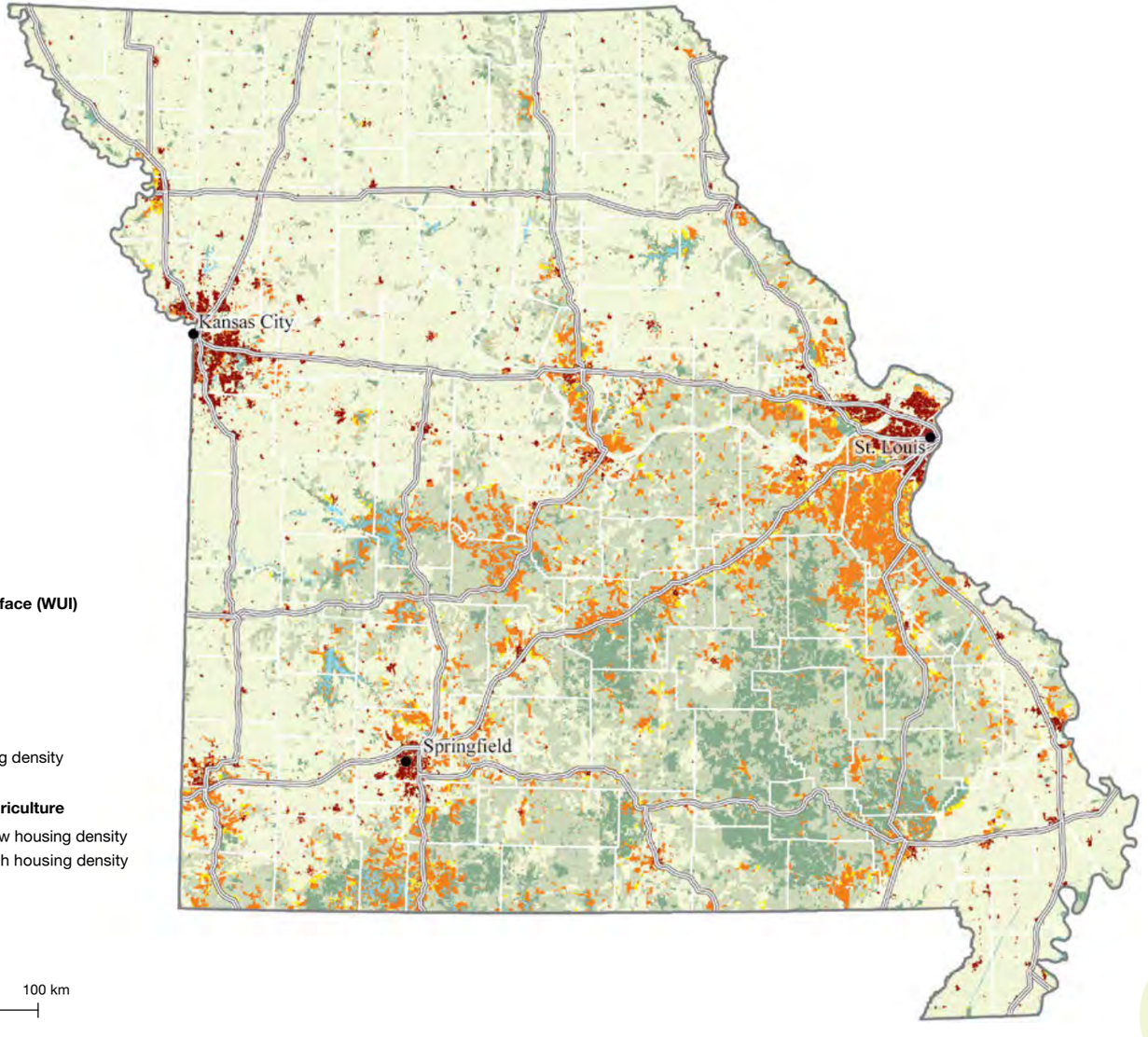
Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

Missouri

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

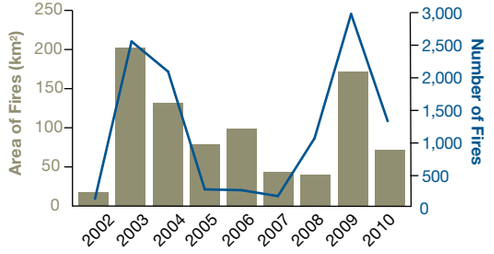
Population and Geography Overview

Census Data	Number	%
Population	5,988,927	
Housing units	2,712,729	
Seasonal use	80,374	3

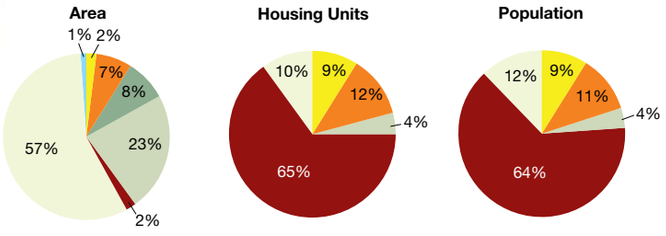
Land Ownership	Area (km²)	%
Public-Federal	8,473	5
Public-State	3,815	2
Public-Local	58	0
Private	168,195	93

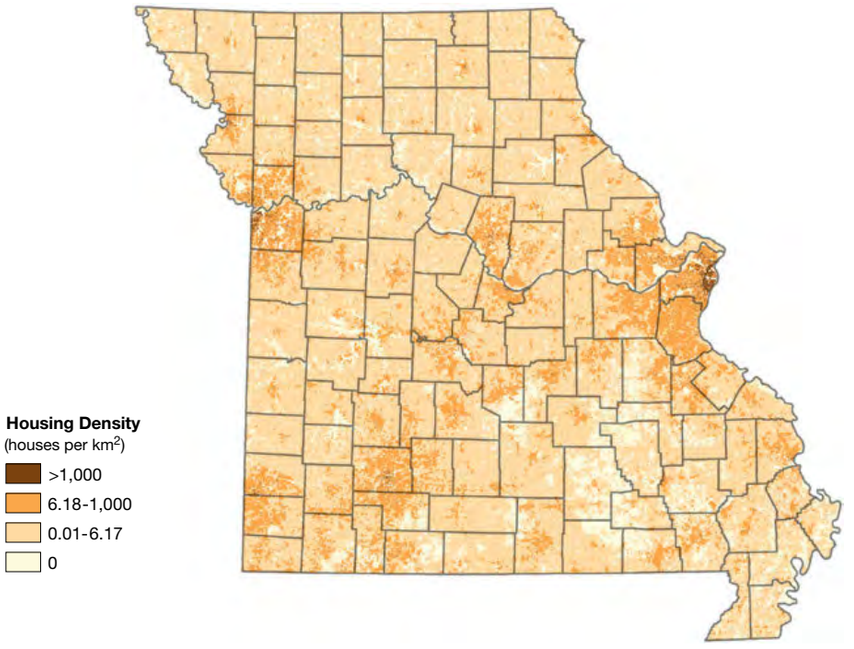
Land Cover	Area (km²)	%
Forest	66,394	37
Shrubland/herbaceous	3,629	2
Planted/cultivated	91,648	51
Developed	12,292	7
Water/wetland	6,302	3
Others	275	0
Total area	180,540	

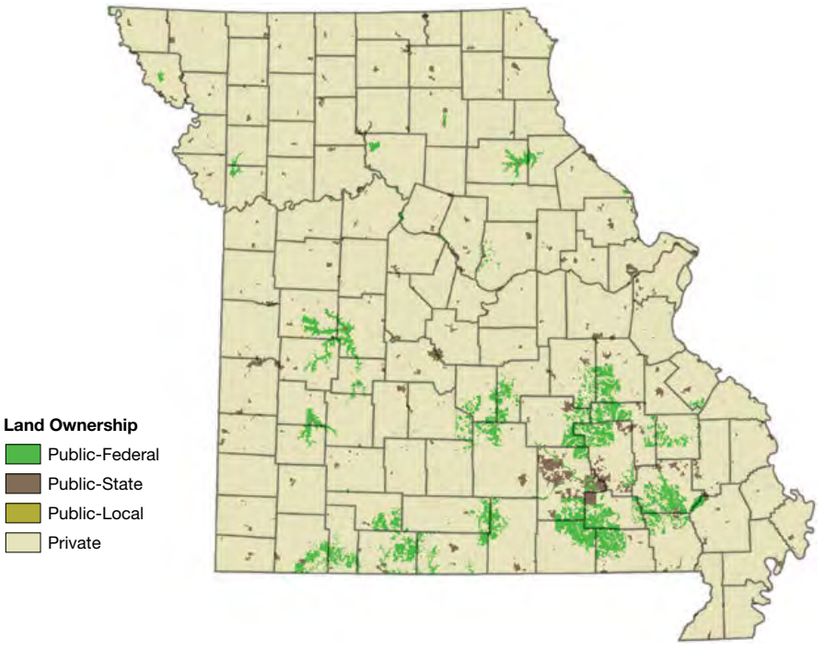
Wildfire History

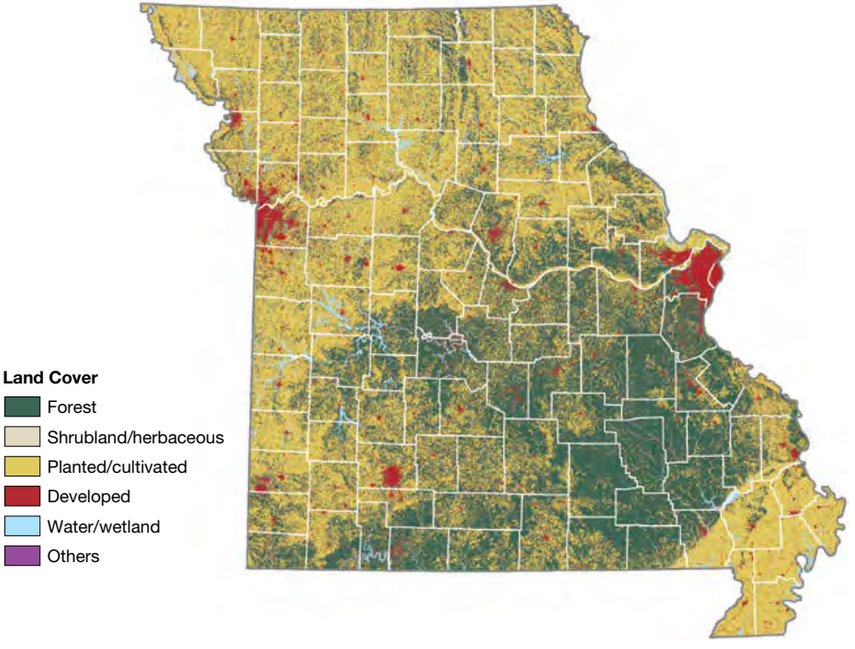


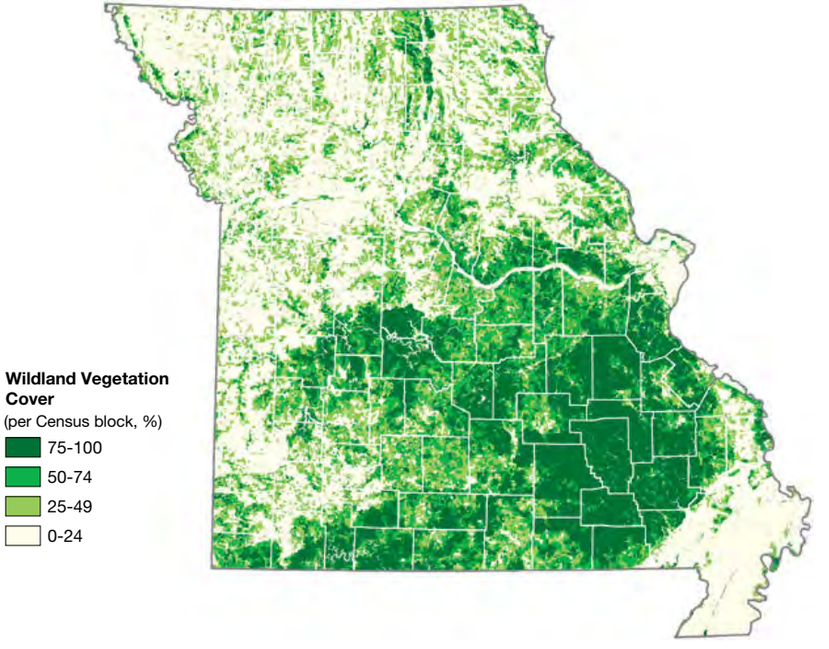
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

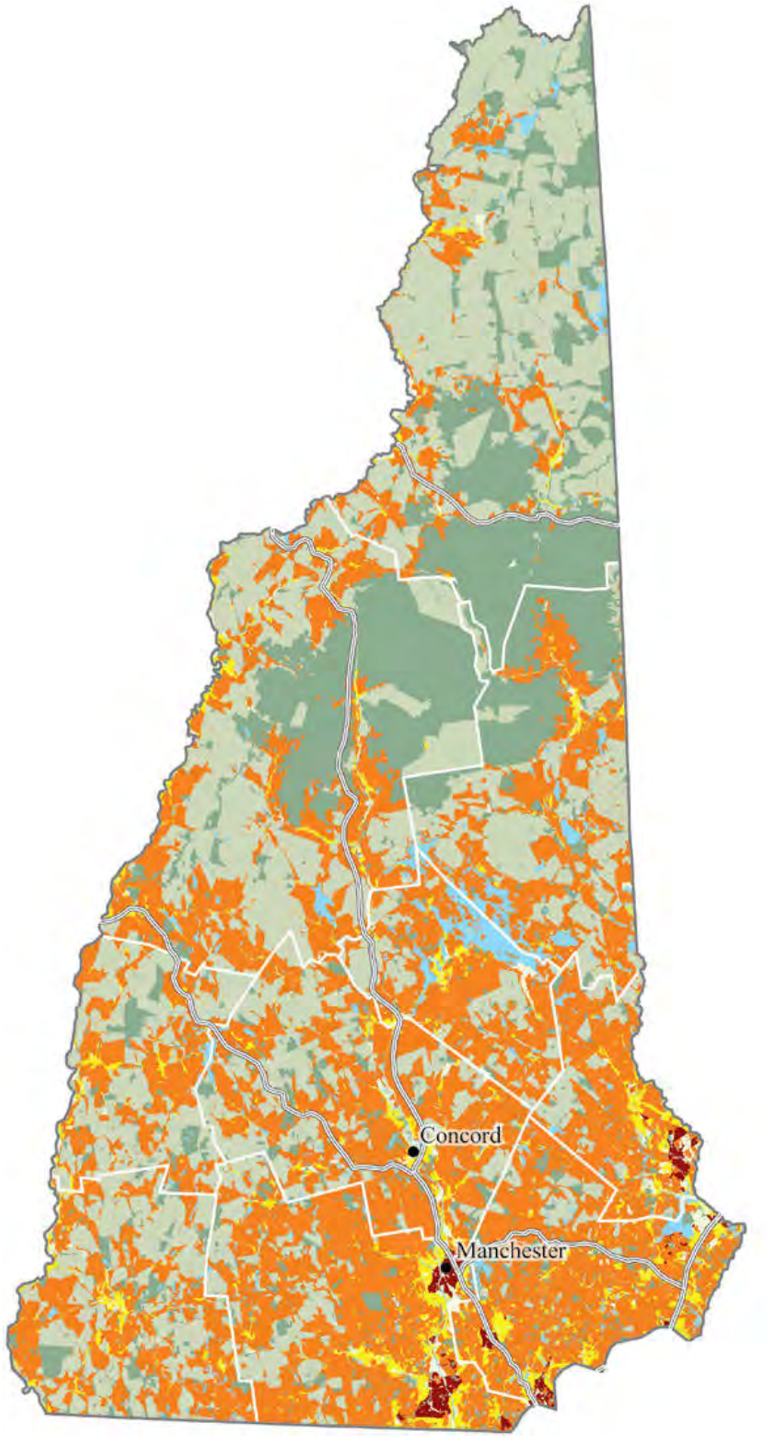

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

New Hampshire

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 25 50 km

For more information on the maps and data presented here, please refer to page 20.

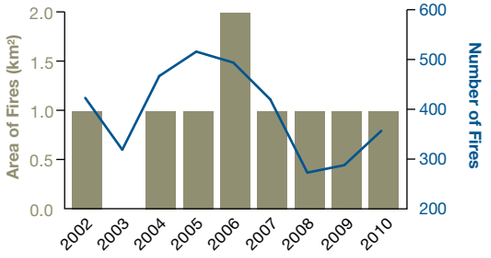
Population and Geography Overview

Census Data	Number	%
Population	1,316,470	
Housing units	614,754	
Seasonal use	63,910	10

Land Ownership	Area (km²)	%
Public-Federal	3,139	13
Public-State	410	2
Public-Local	348	1
Private	20,140	84

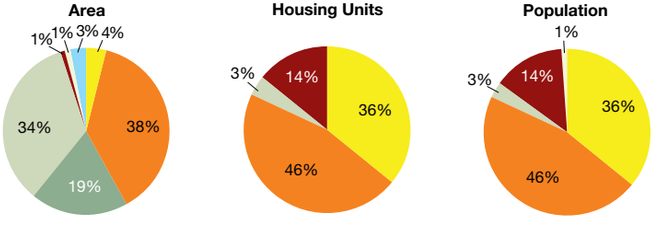
Land Cover	Area (km²)	%
Forest	18,585	77
Shrubland/herbaceous	723	3
Planted/cultivated	973	4
Developed	1,856	8
Water/wetland	1,806	8
Others	94	0
Total area	24,036	

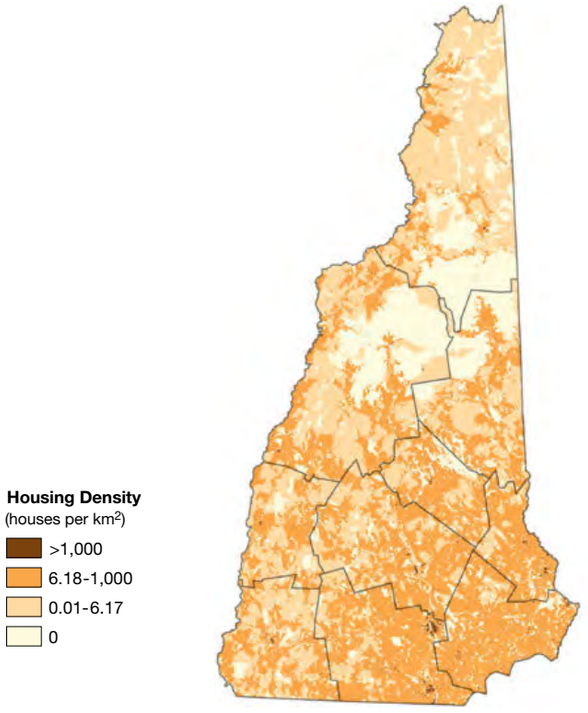
Wildfire History

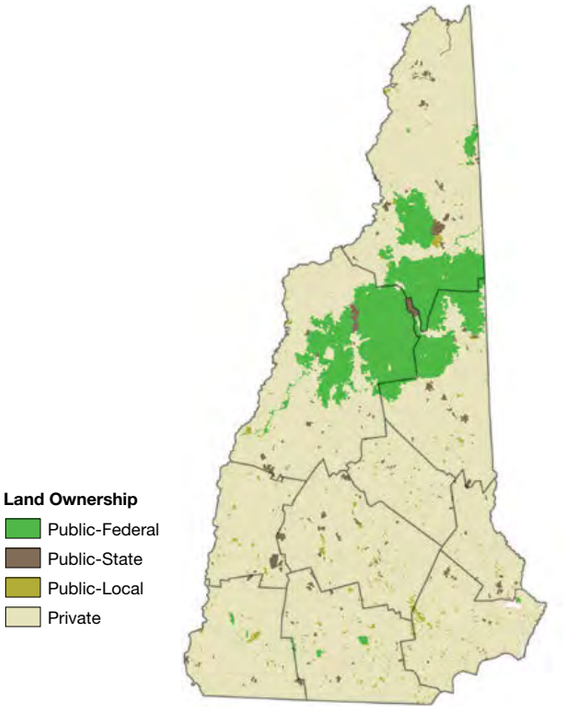


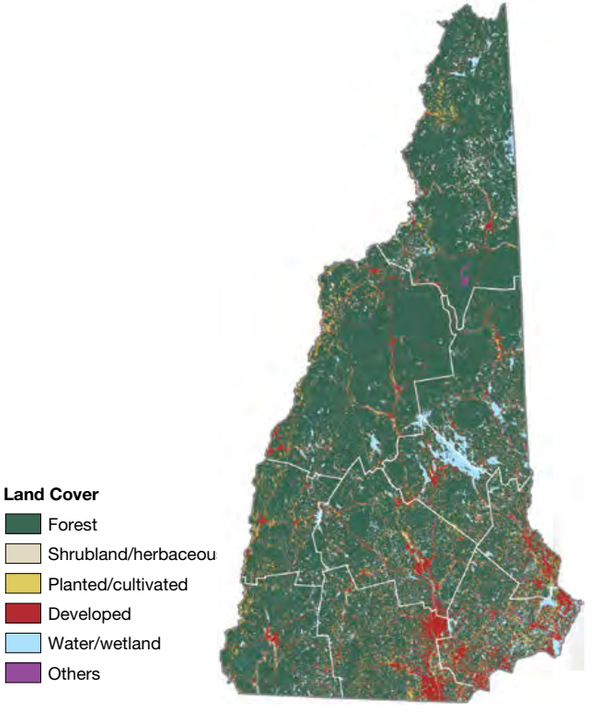
The extent of wildfires is expressed in whole numbers (km²). Therefore, years with wildfire area less than 1 km² appears to have a value of 0.

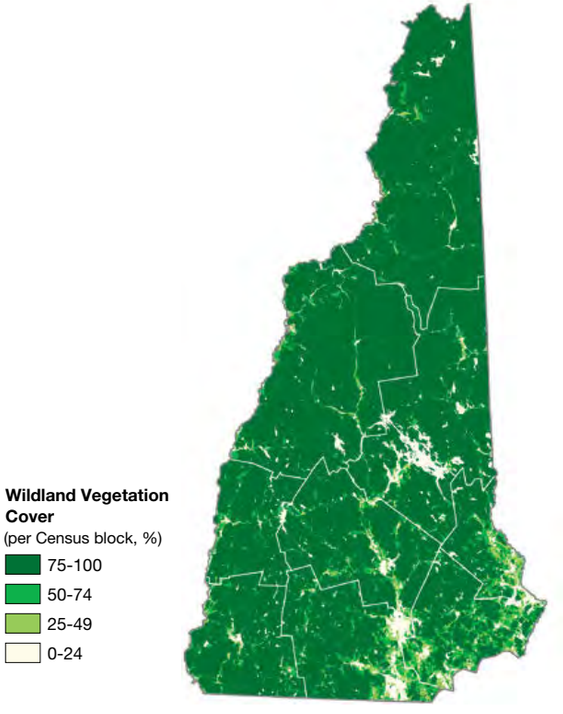
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

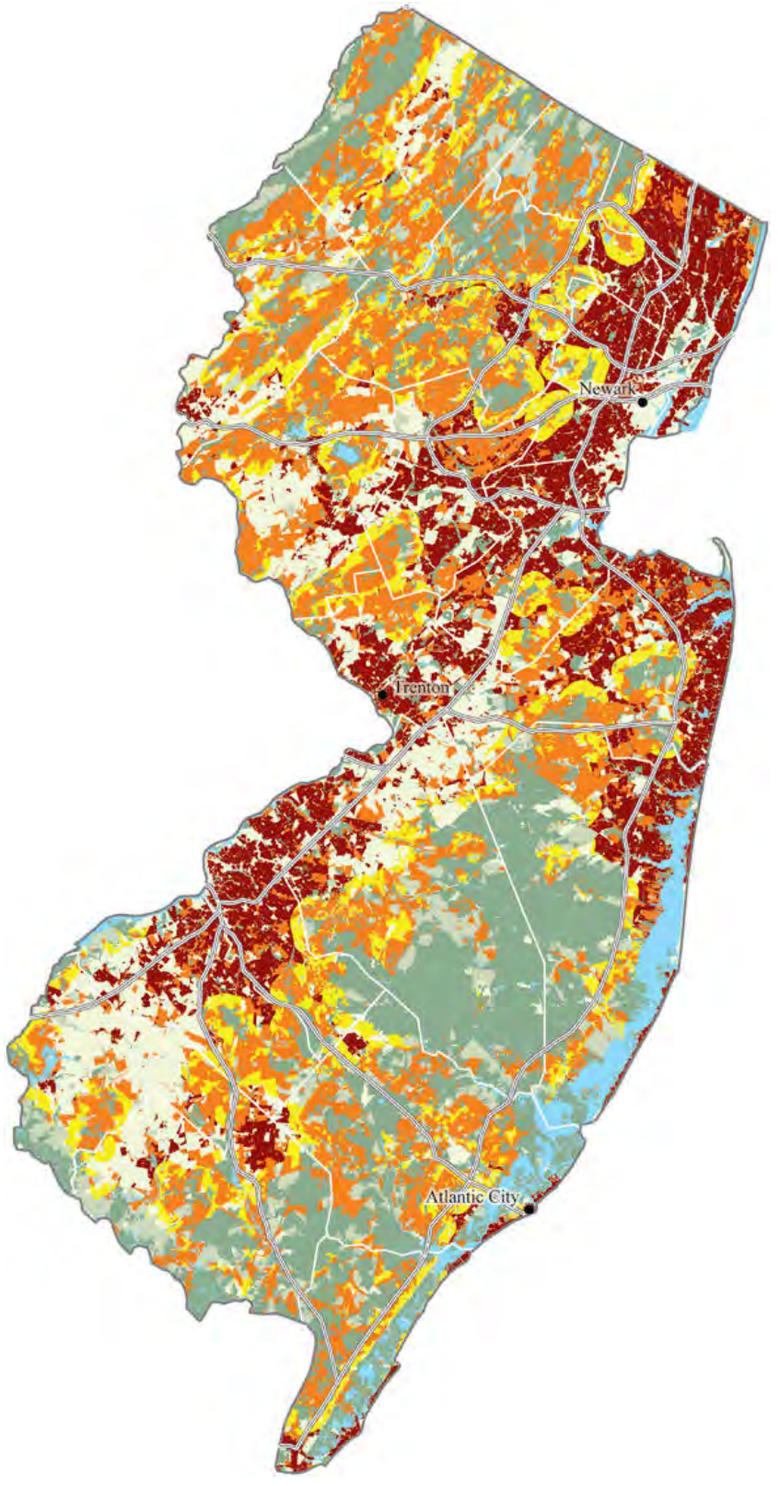

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceou
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

New Jersey

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 25 50 km

For more information on the maps and data presented here, please refer to page 20.

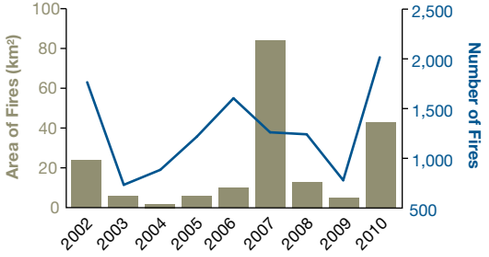
Population and Geography Overview

Census Data	Number	%
Population	8,791,894	
Housing units	3,553,562	
Seasonal use	134,903	4

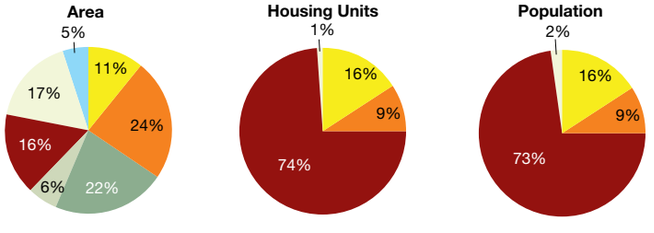
Land Ownership	Area (km²)	%
Public-Federal	703	3
Public-State	2,776	14
Public-Local	754	4
Private	15,952	79

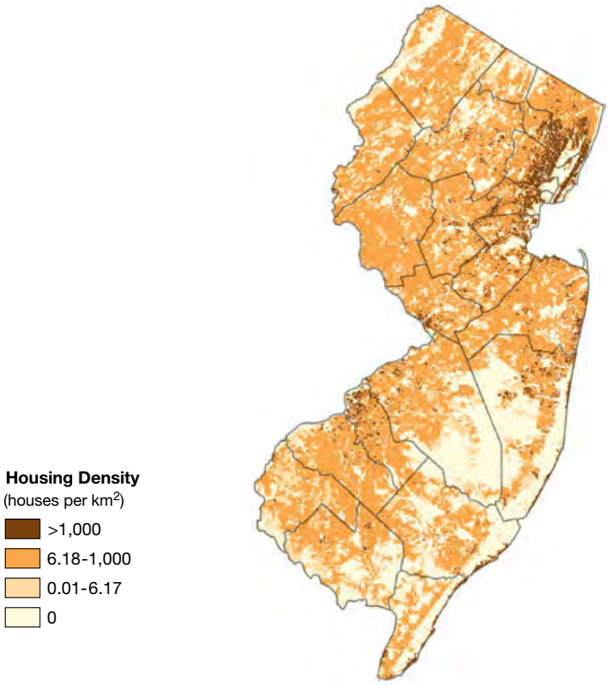
Land Cover	Area (km²)	%
Forest	6,312	31
Shrubland/herbaceous	465	2
Planted/cultivated	2,863	14
Developed	5,889	29
Water/wetland	4,533	22
Others	123	1
Total area	20,184	

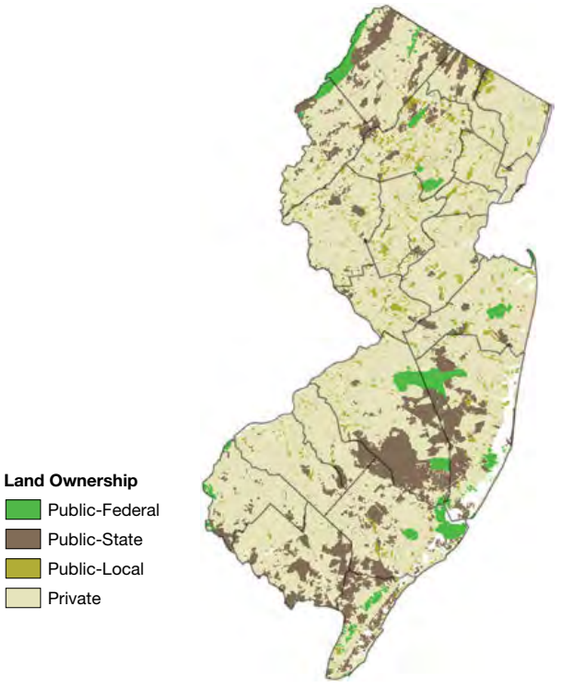
Wildfire History

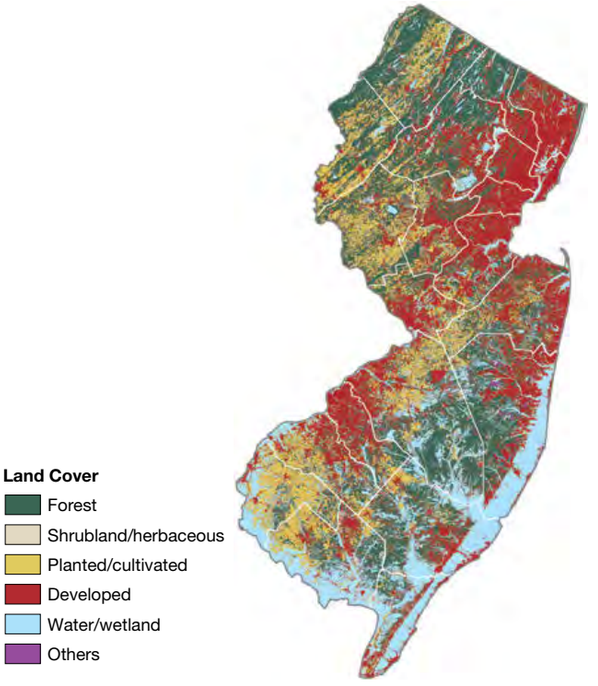


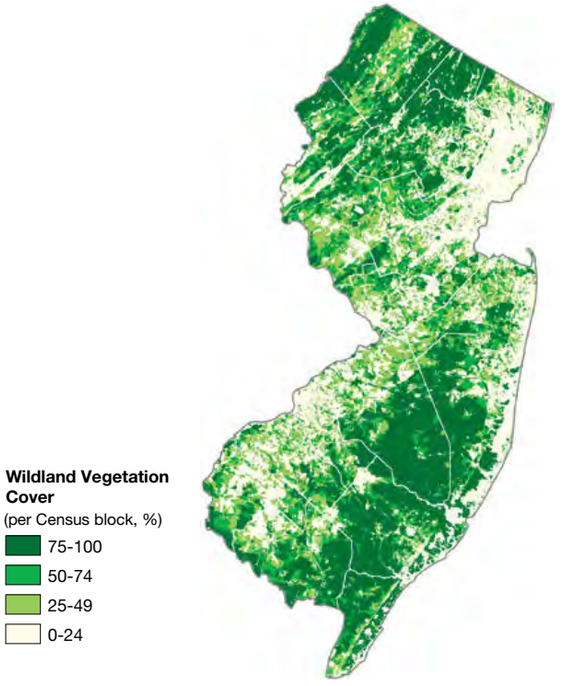
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0


Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

New York

Eastern Region

Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

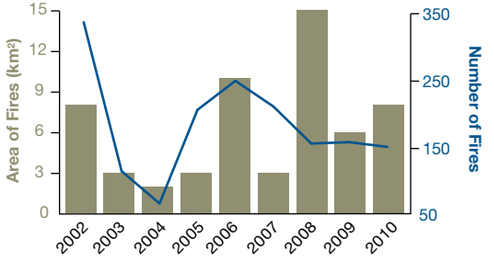
Population and Geography Overview

Census Data	Number	%
Population	19,378,102	
Housing units	8,108,103	
Seasonal use	289,301	4

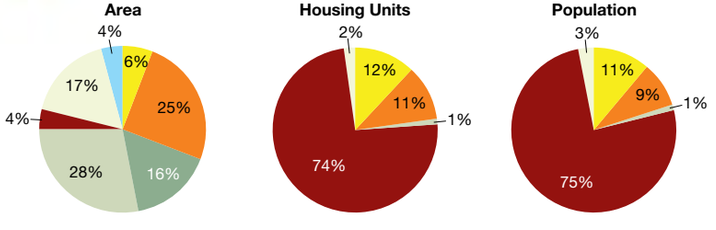
Land Ownership	Area (km²)	%
Public-Federal	1,010	1
Public-State	16,849	13
Public-Local	648	1
Private	108,701	85

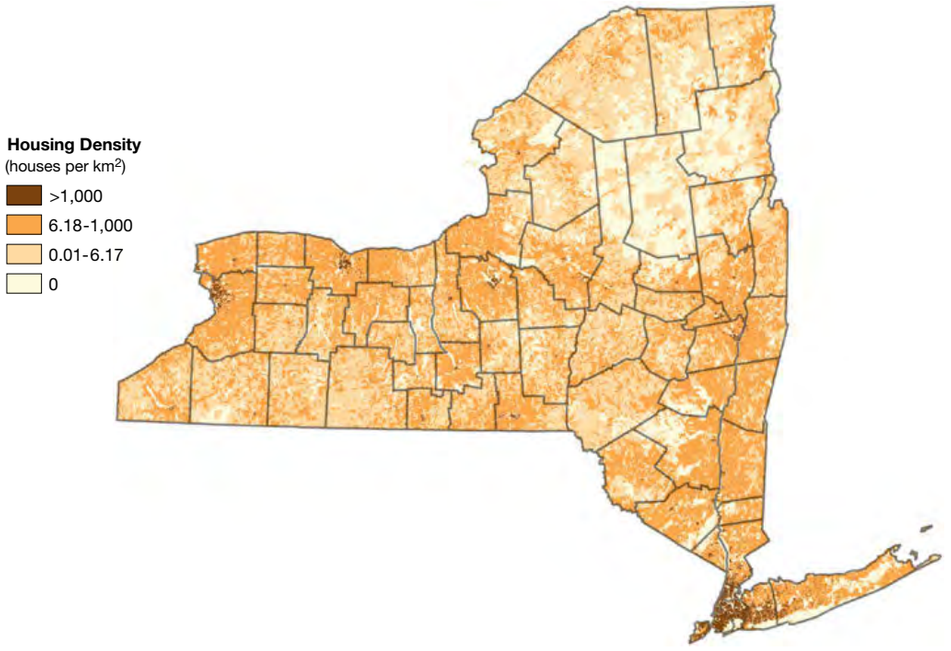
Land Cover	Area (km²)	%
Forest	66,415	52
Shrubland/herbaceous	5,291	4
Planted/cultivated	27,945	22
Developed	11,422	9
Water/wetland	15,860	12
Others	274	0
Total area	127,208	

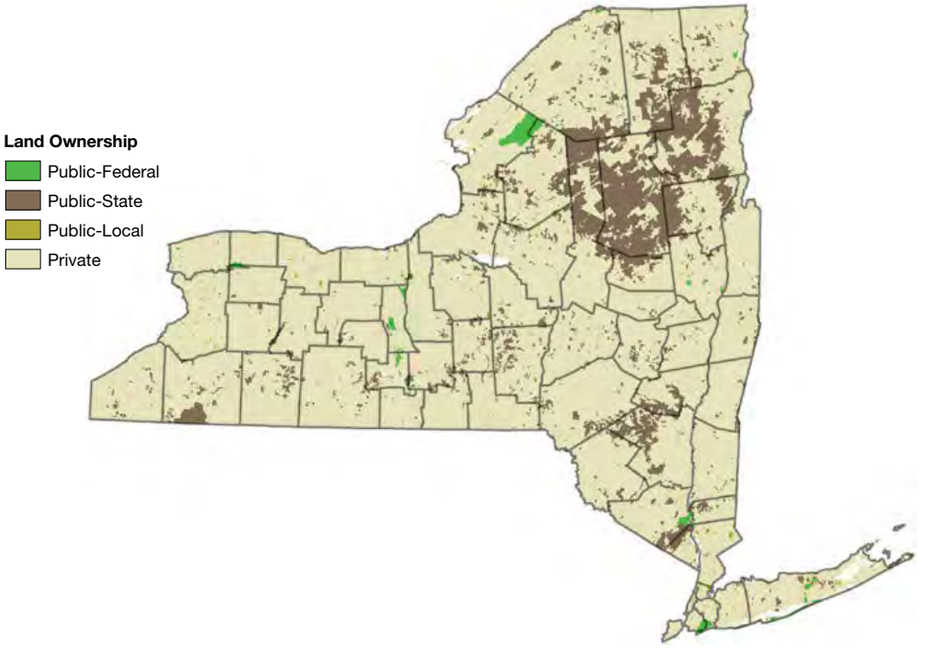
Wildfire History

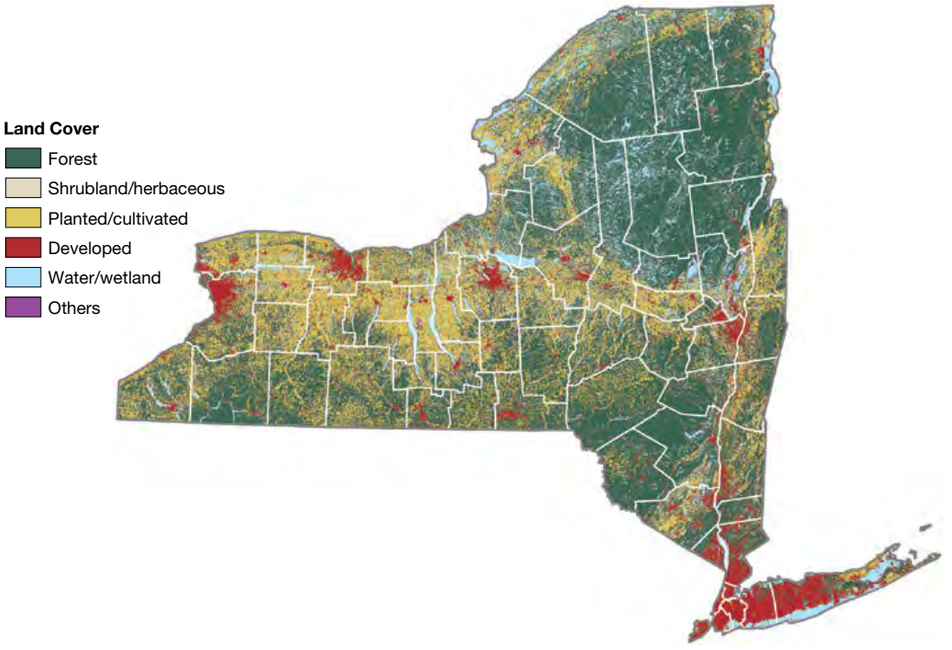


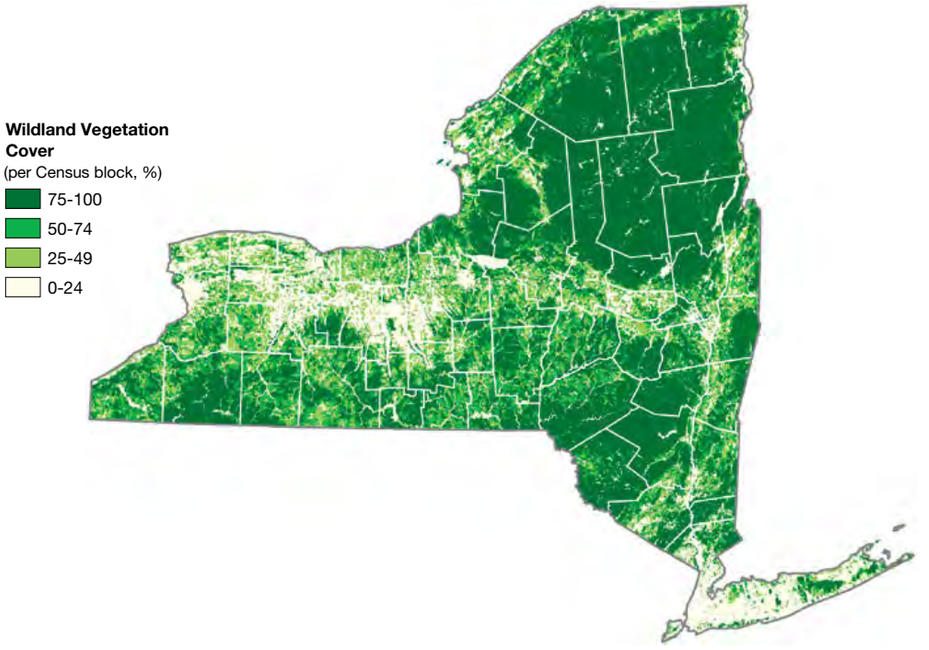
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

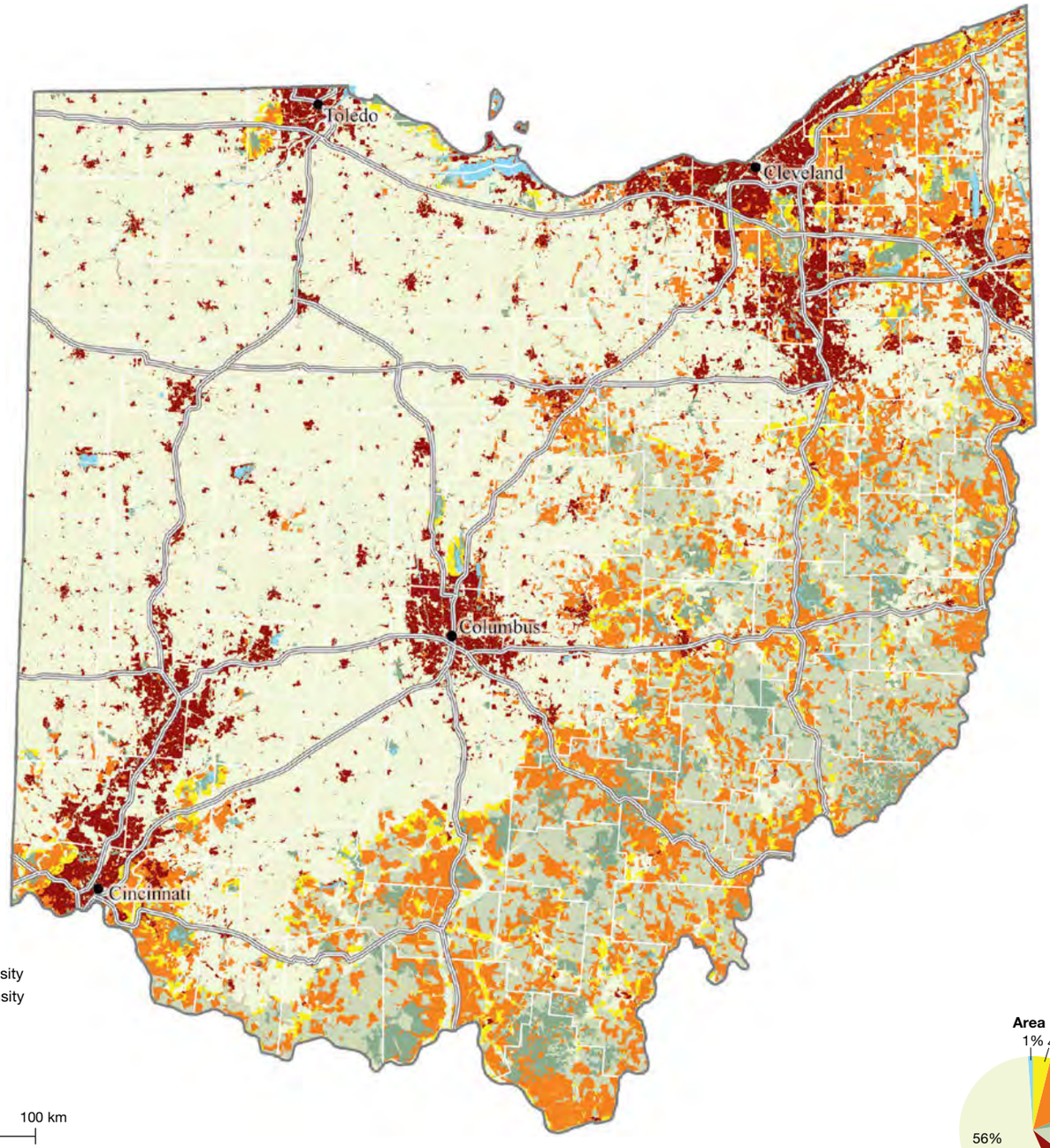

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Ohio

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

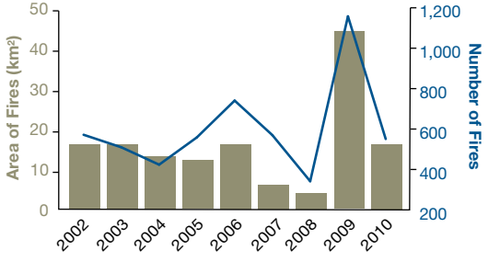
Population and Geography Overview

Census Data	Number	%
Population	11,536,504	
Housing units	5,127,508	
Seasonal use	58,591	1

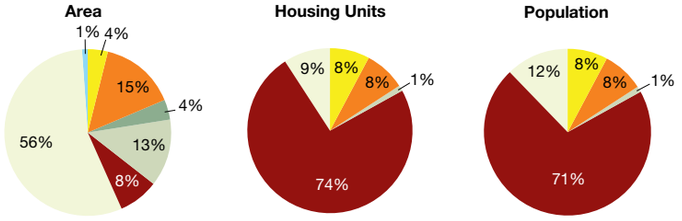
Land Ownership	Area (km²)	%
Public-Federal	1,265	1
Public-State	2,318	2
Public-Local	689	1
Private	102,784	96

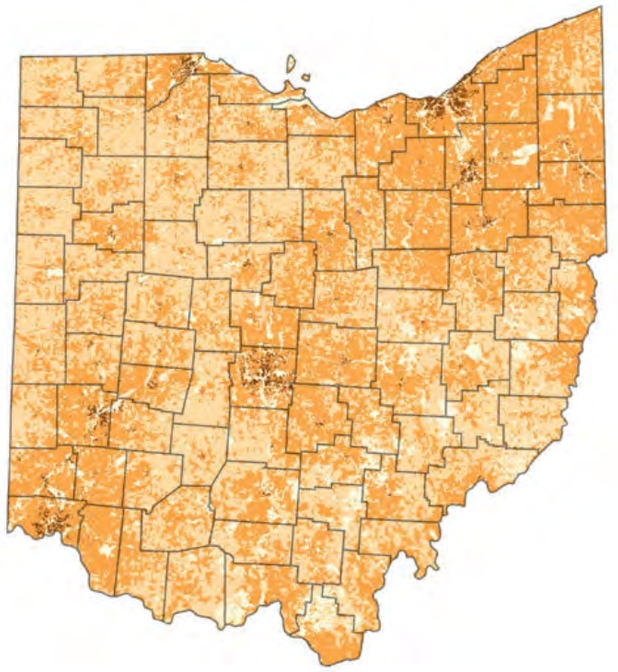
Land Cover	Area (km²)	%
Forest	33,304	31
Shrubland/herbaceous	2,131	2
Planted/cultivated	53,567	50
Developed	15,502	14
Water/wetland	2,348	2
Others	203	0
Total area	107,056	

Wildfire History

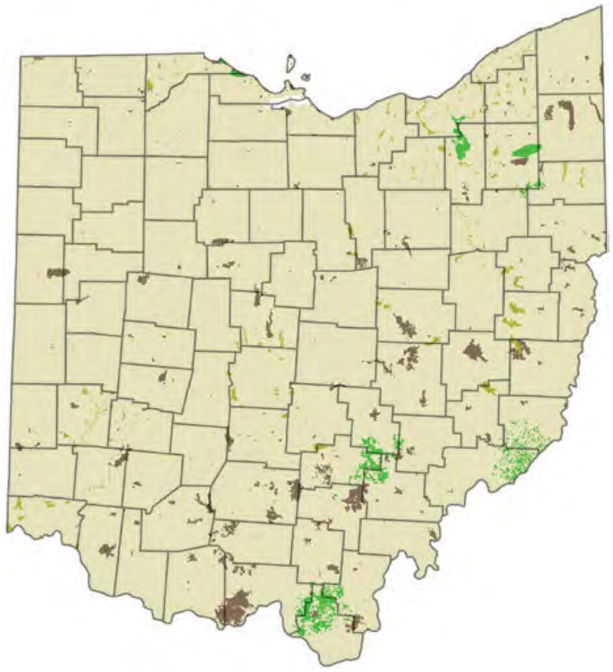


WUI in Numbers (see legend)

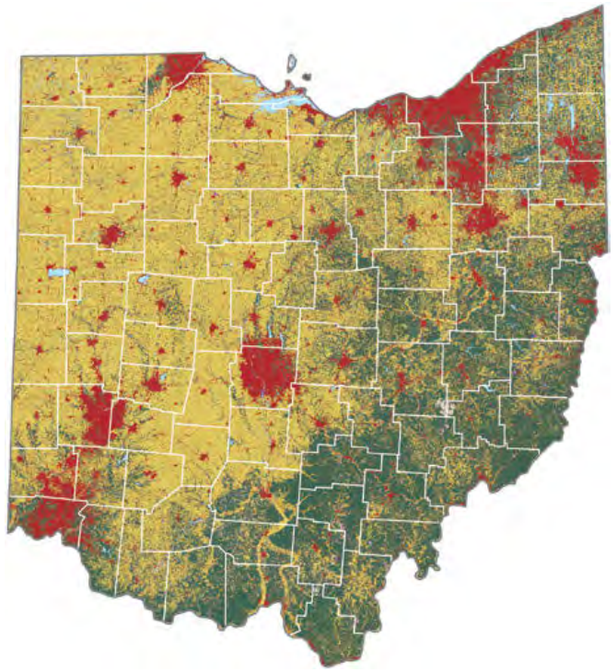




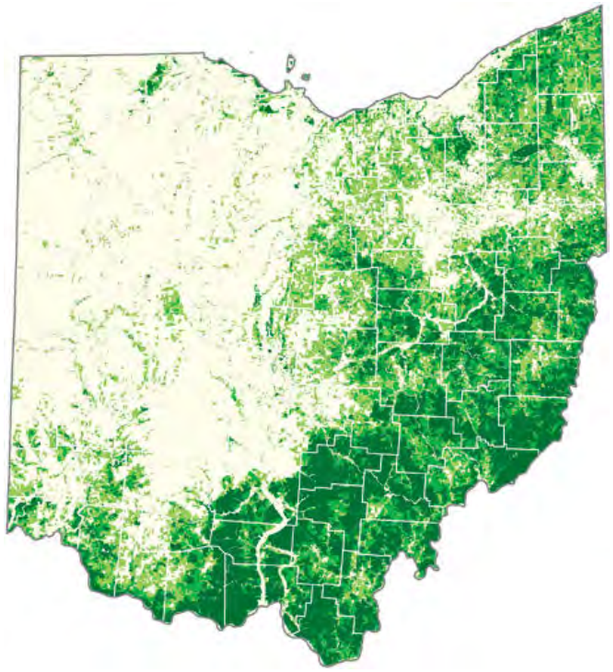
Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private



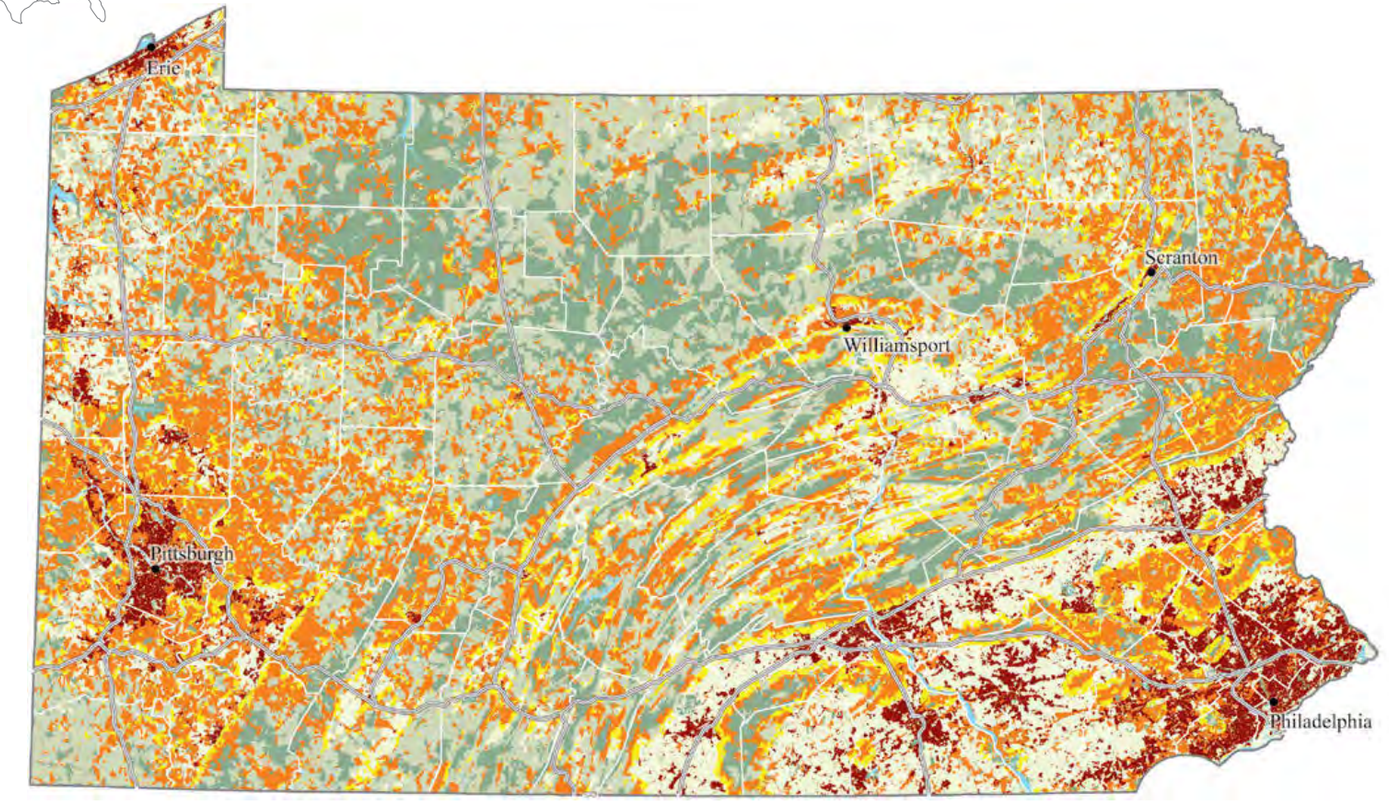
Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

Pennsylvania

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

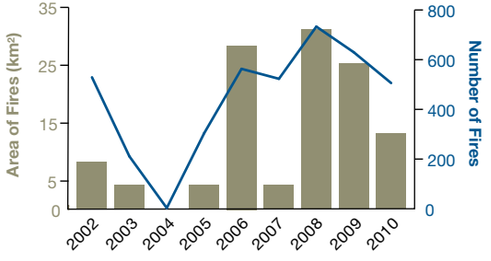
Population and Geography Overview

Census Data	Number	%
Population	12,702,379	
Housing units	5,567,315	
Seasonal use	161,582	3

Land Ownership	Area (km²)	%
Public-Federal	2,292	2
Public-State	15,461	13
Public-Local	523	0
Private	99,065	84

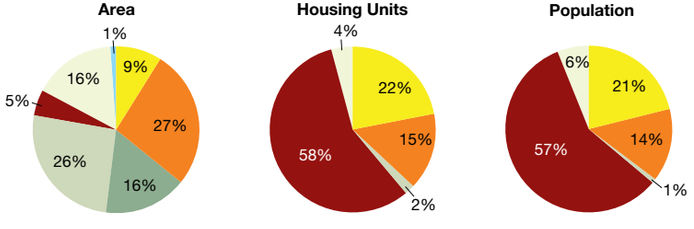
Land Cover	Area (km²)	%
Forest	70,681	60
Shrubland/herbaceous	2,571	2
Planted/cultivated	26,980	23
Developed	13,978	12
Water/wetland	2,682	2
Others	450	0
Total area	117,342	

Wildfire History



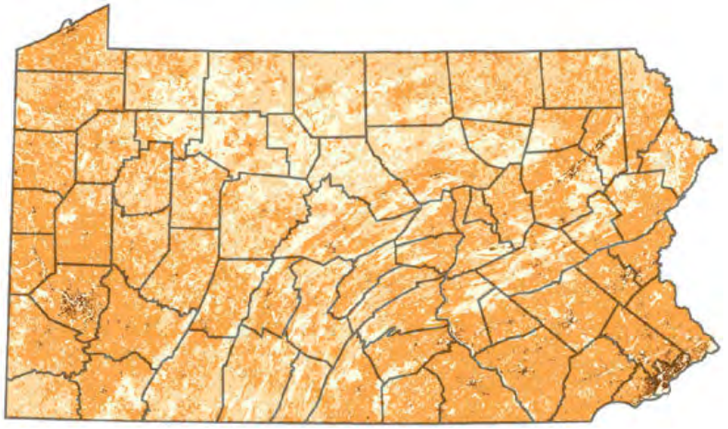
The extent of wildfires is expressed in whole numbers (km²). Therefore, years with wildfire area less than 1 km² appears to have a value of 0.

WUI in Numbers (see legend)



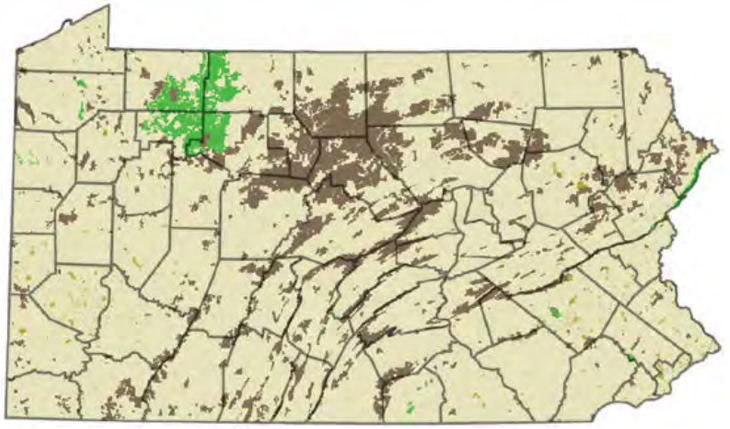
Housing Density
(houses per km^2)

- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



Land Ownership

- Public-Federal
- Public-State
- Public-Local
- Private

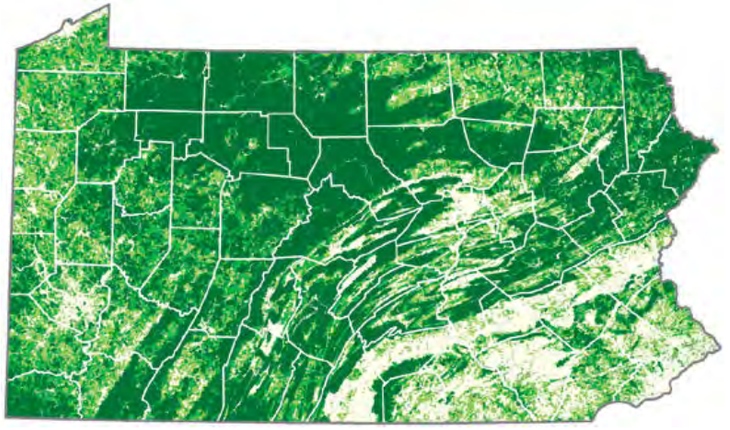


Land Cover

- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others

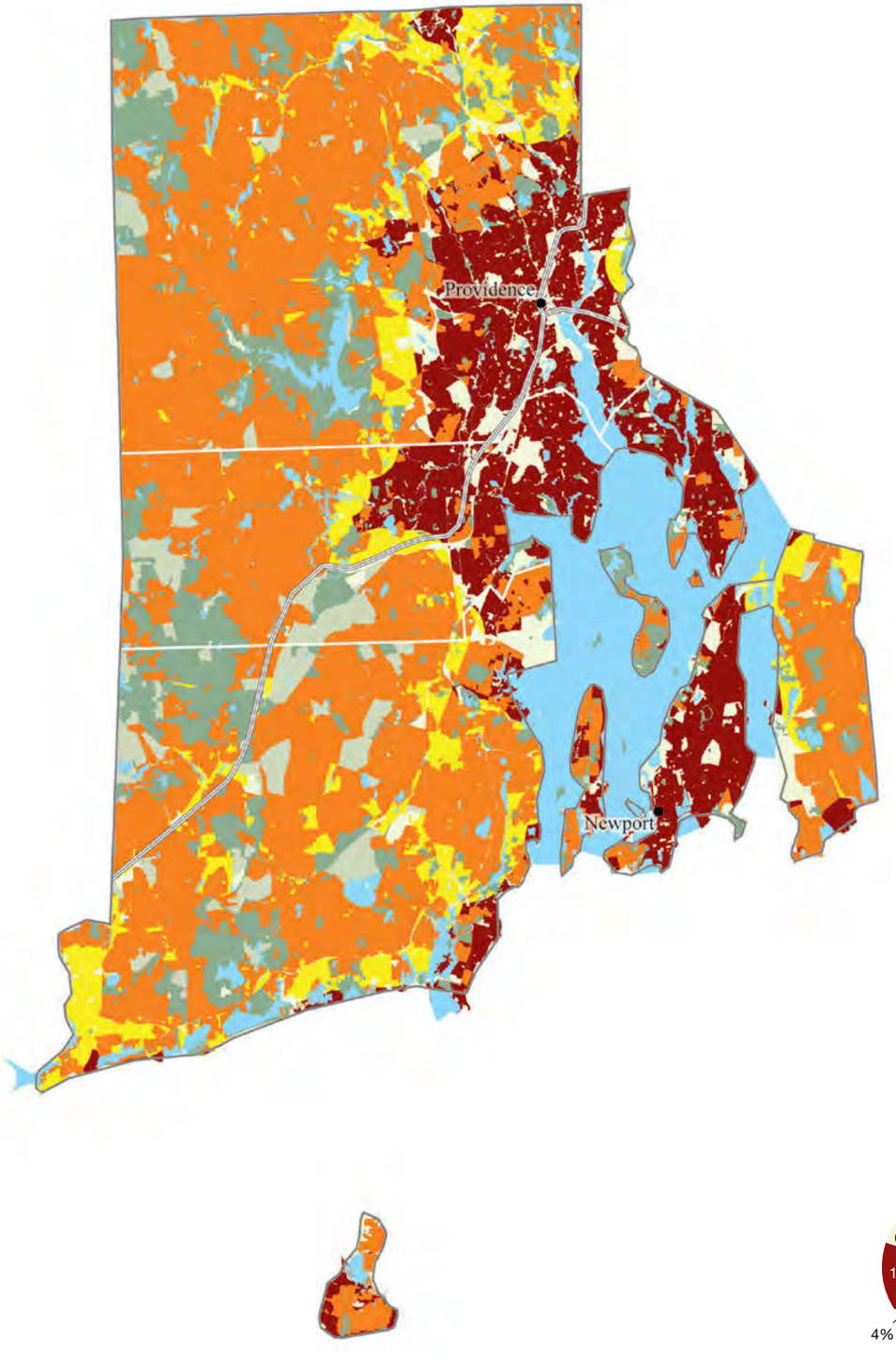
Wildland Vegetation Cover
(per Census block, %)

- 75-100
- 50-74
- 25-49
- 0-24



Rhode Island

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 10 20 km

For more information on the maps and data presented here, please refer to page 20.

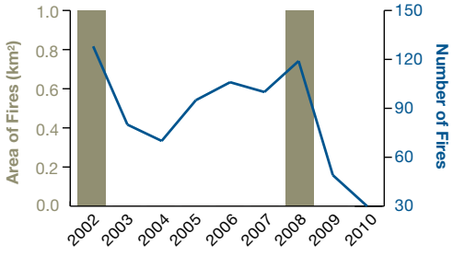
Population and Geography Overview

Census Data	Number	%
Population	1,052,567	
Housing units	463,388	
Seasonal use	17,077	4

Land Ownership	Area (km²)	%
Public-Federal	9	0
Public-State	213	7
Public-Local	140	4
Private	2,787	88

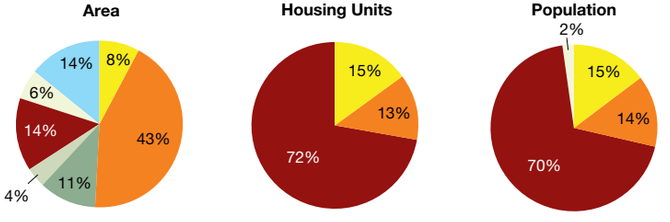
Land Cover	Area (km²)	%
Forest	1,296	41
Shrubland/herbaceous	51	2
Planted/cultivated	145	5
Developed	855	27
Water/wetland	782	25
Others	20	1
Total area	3,149	

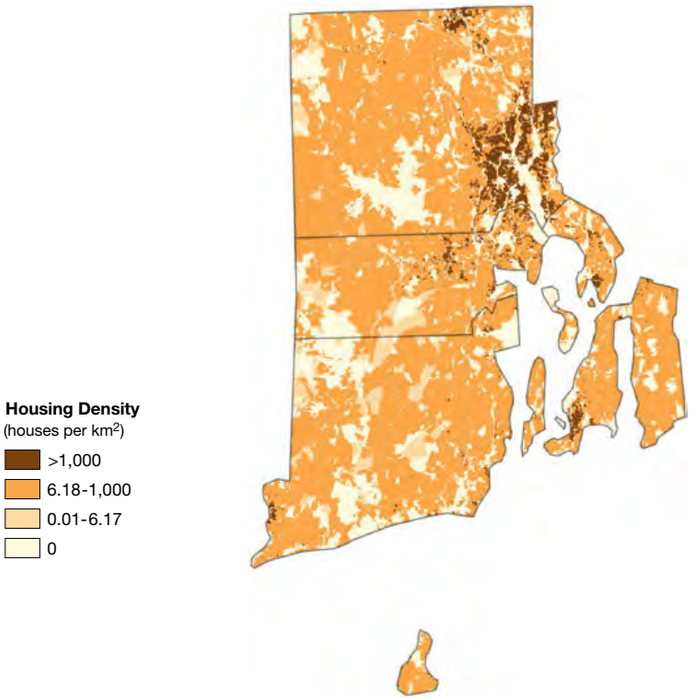
Wildfire History

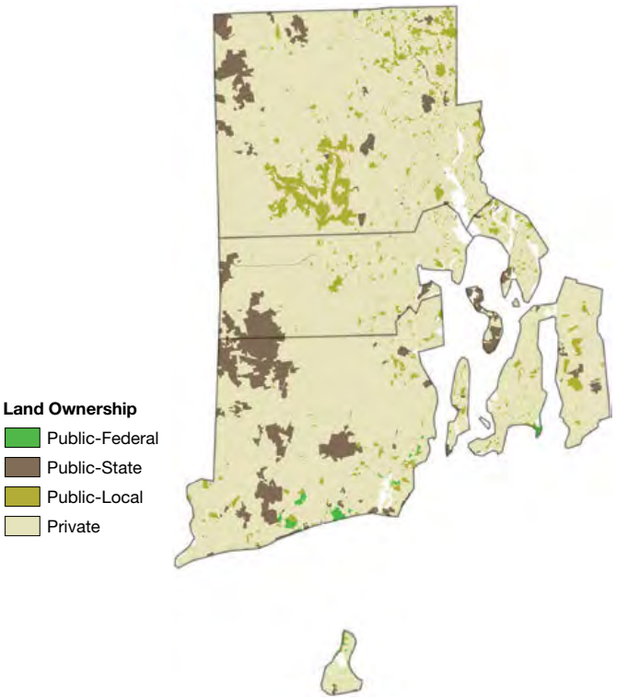


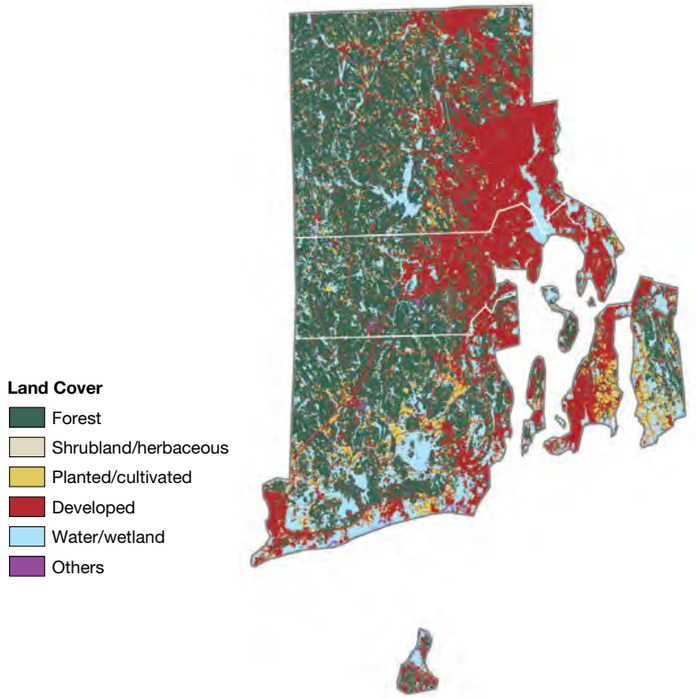
The extent of wildfires is expressed in whole numbers (km²). Therefore, years with wildfire area less than 1 km² appears to have a value of 0.

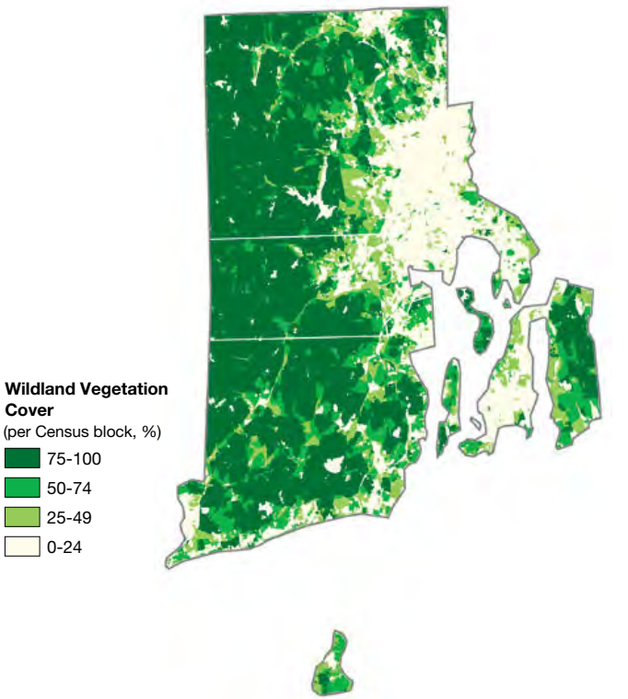
WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

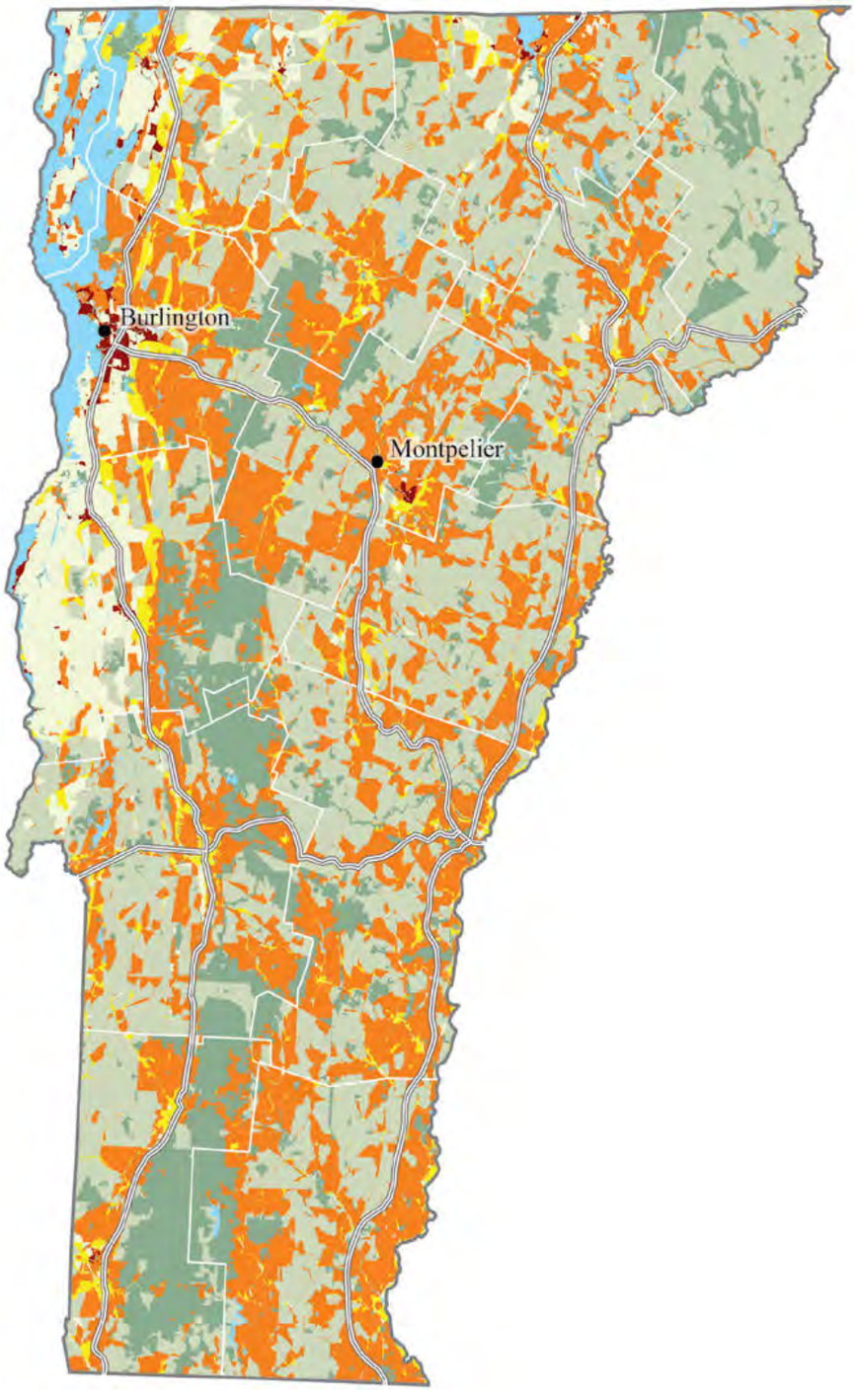

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Vermont

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 25 50 km

For more information on the maps and data presented here, please refer to page 20.

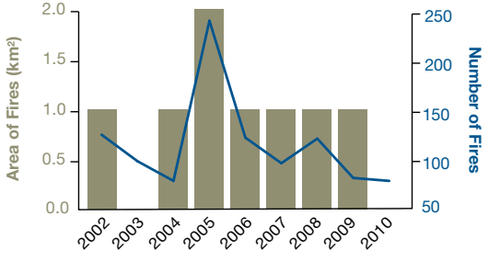
Population and Geography Overview

Census Data	Number	%
Population	625,741	
Housing units	322,539	
Seasonal use	50,198	16

Land Ownership	Area (km²)	%
Public-Federal	1,803	7
Public-State	1,109	4
Public-Local	263	1
Private	21,731	87

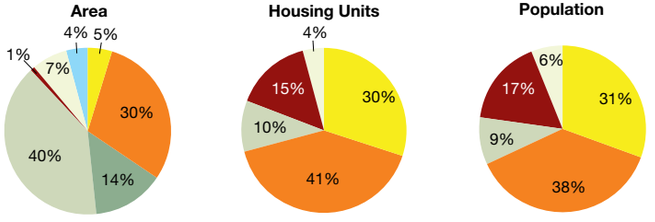
Land Cover	Area (km²)	%
Forest	17,845	72
Shrubland/herbaceous	528	2
Planted/cultivated	3,419	14
Developed	1,315	5
Water/wetland	1,758	7
Others	41	0
Total area	24,906	

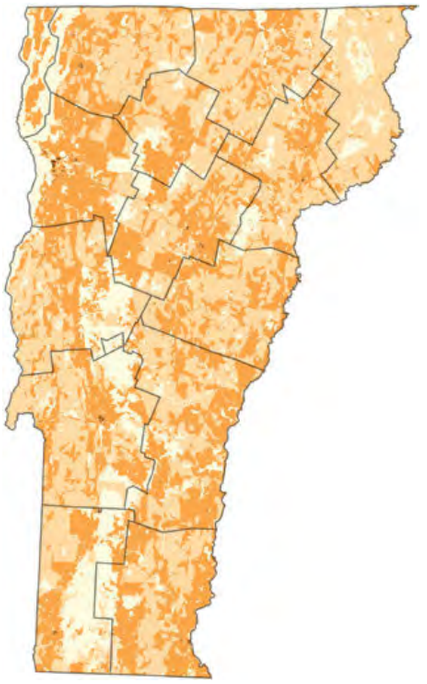
Wildfire History



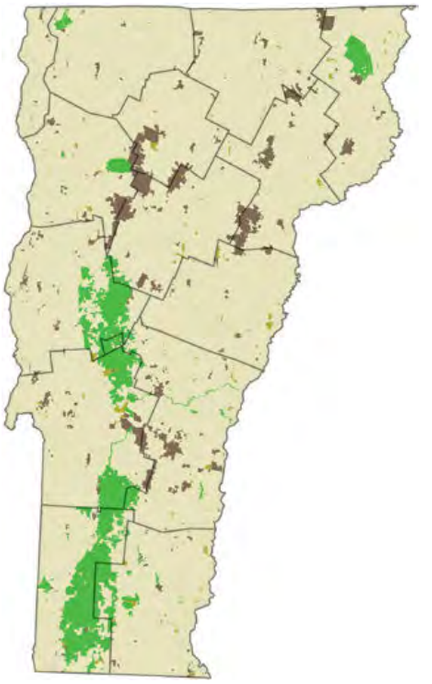
The extent of wildfires is expressed in whole numbers (km²). Therefore, years with wildfire area less than 1 km² appears to have a value of 0.

WUI in Numbers (see legend)



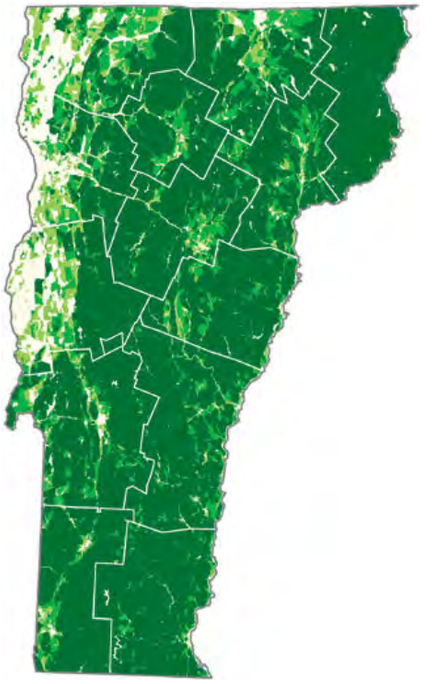


Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private

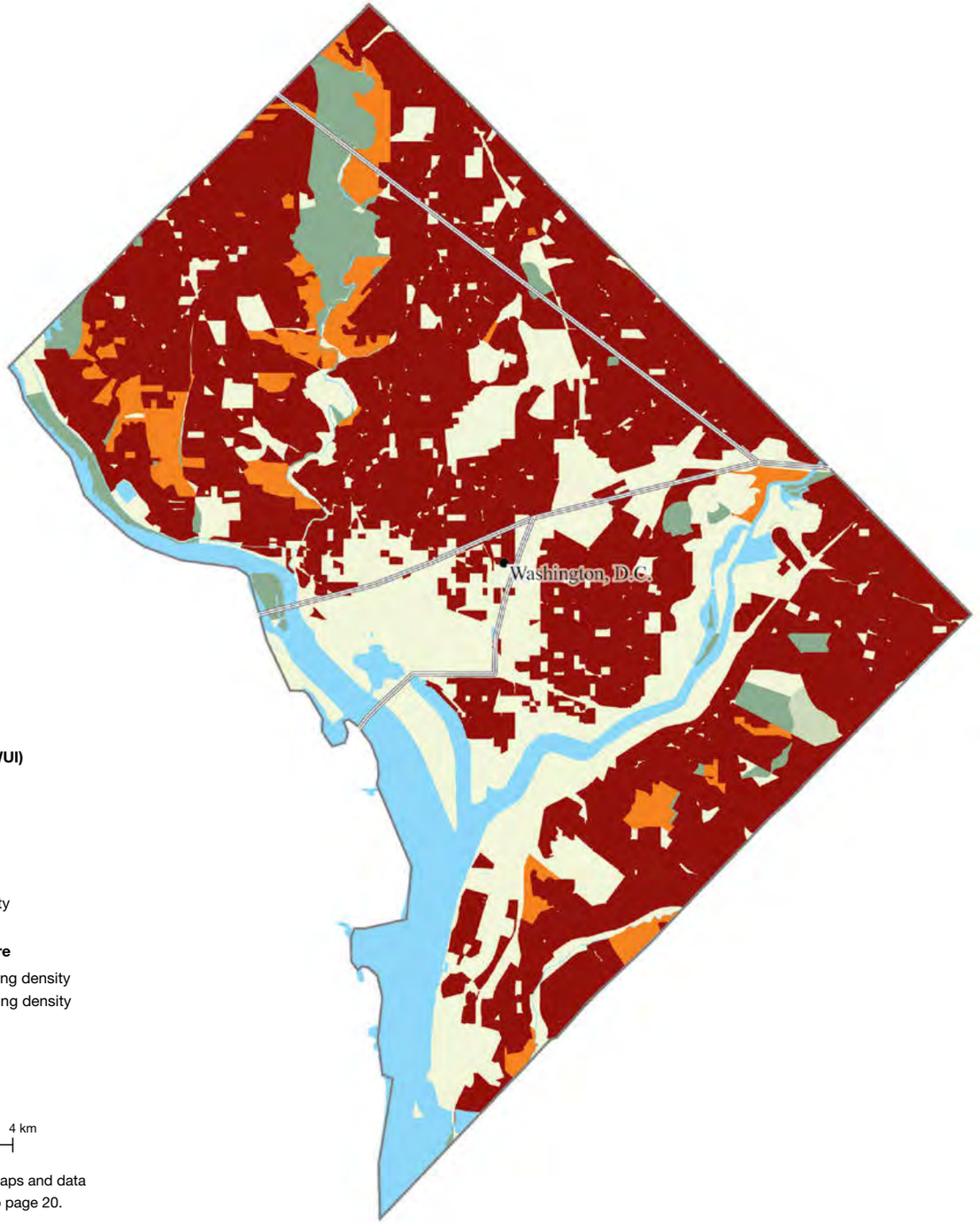
Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

Washington, D.C.

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 2 4 km

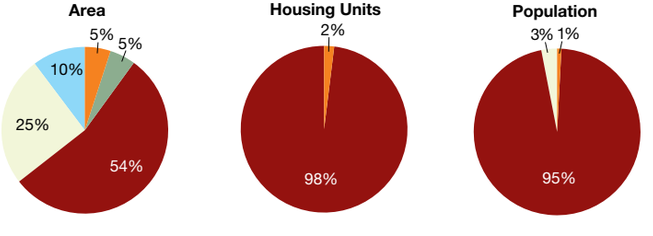
For more information on the maps and data presented here, please refer to page 20.

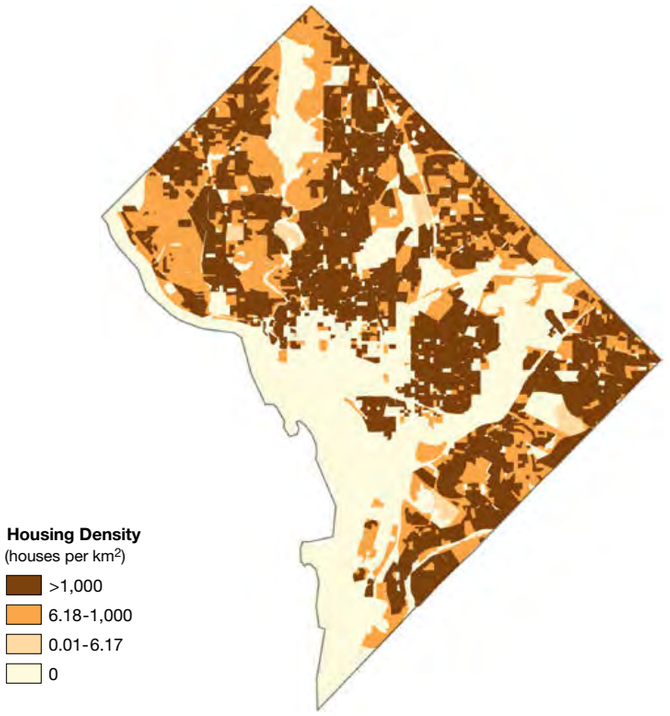
Population and Geography Overview

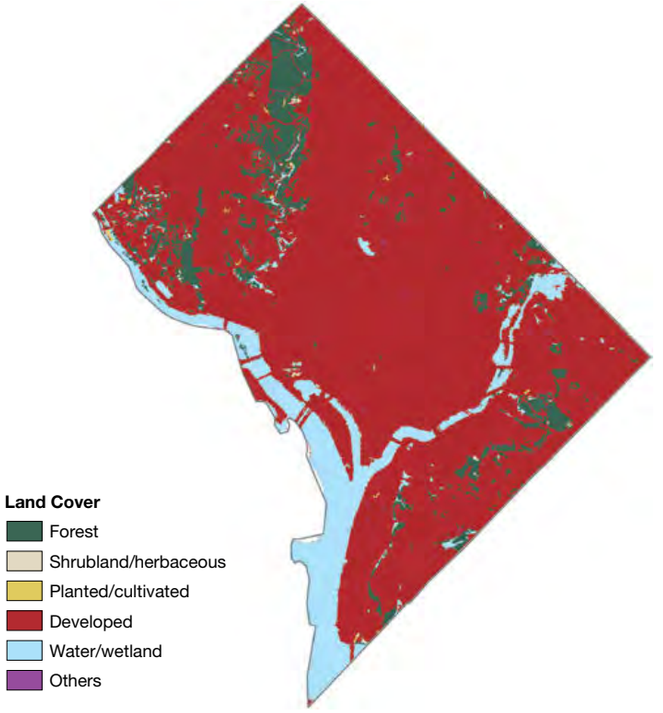
Census Data	Number	%
Population	601,723	
Housing units	296,719	
Seasonal use	3,537	1

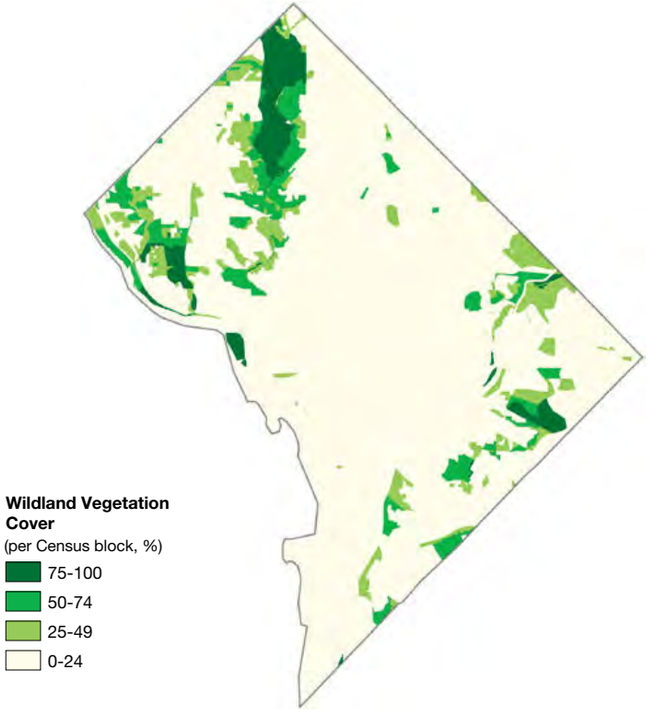
Land Cover	Area (km²)	%
Forest	16	9
Shrubland/herbaceous	0	0
Planted/cultivated	0	0
Developed	140	79
Water/wetland	20	11
Others	0	0
Total area	177	

WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

West Virginia

Eastern Region

Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

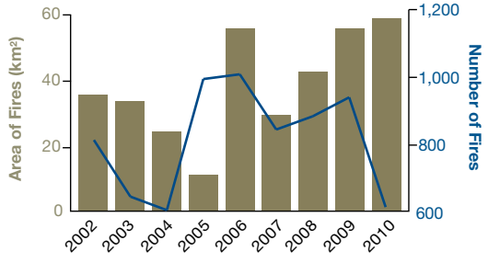
Population and Geography Overview

Census Data	Number	%
Population	1,852,994	
Housing units	881,917	
Seasonal use	38,283	4

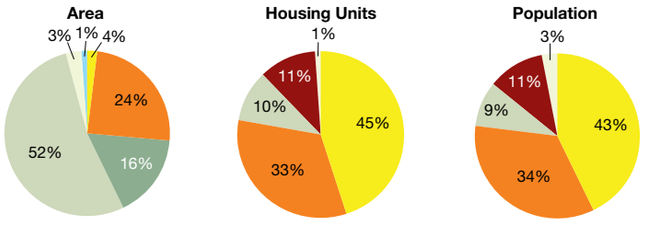
Land Ownership	Area (km²)	%
Public-Federal	4,763	8
Public-State	1,996	3
Public-Local	10	0
Private	55,987	89

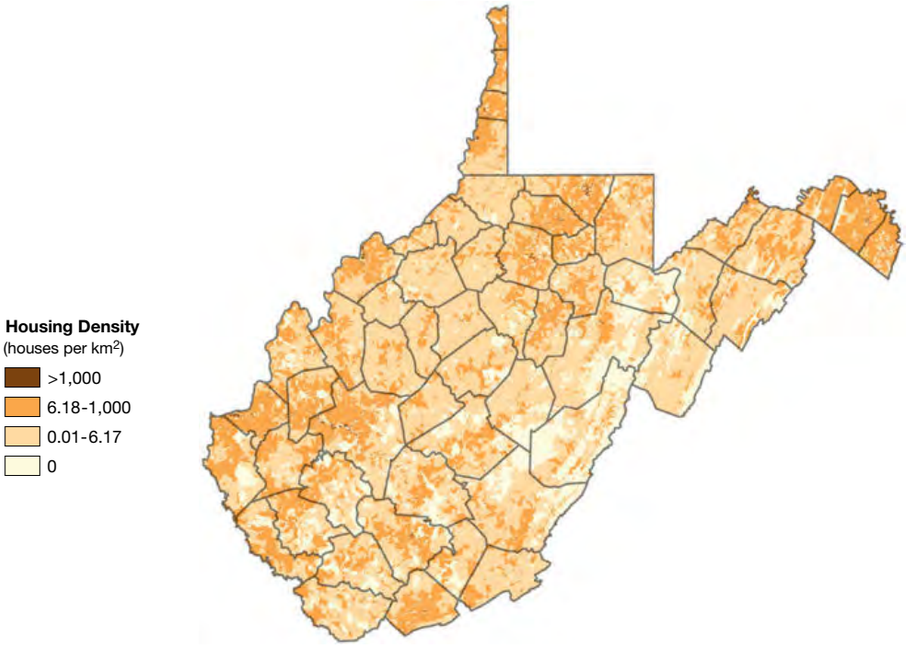
Land Cover	Area (km²)	%
Forest	50,747	81
Shrubland/herbaceous	1,037	2
Planted/cultivated	5,582	9
Developed	4,346	7
Water/wetland	619	1
Others	424	1
Total area	62,755	

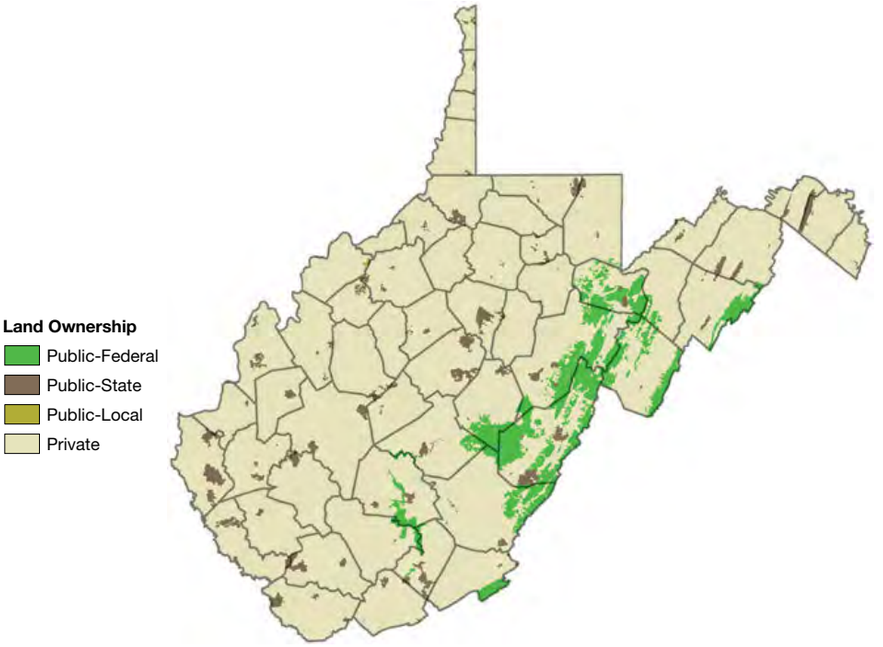
Wildfire History

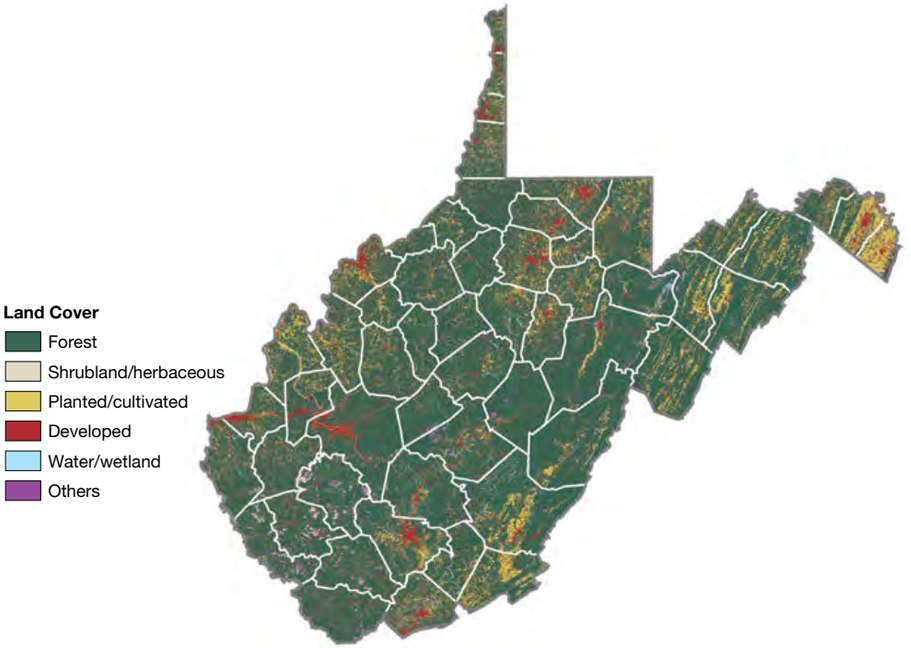


WUI in Numbers (see legend)




Housing Density
(houses per km2)
>1,000
6.18-1,000
0.01-6.17
0

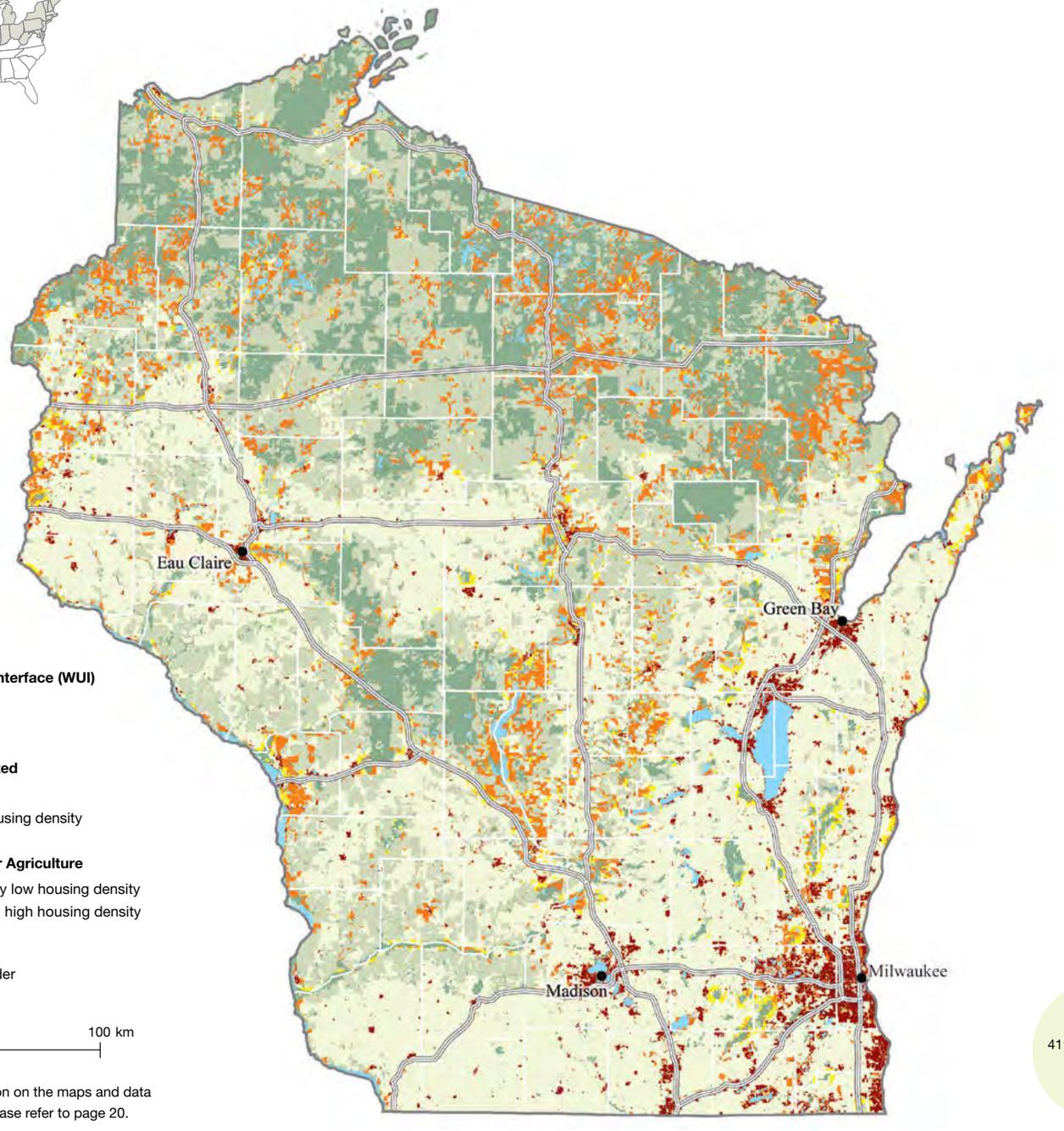

Land Ownership
Public-Federal
Public-State
Public-Local
Private


Land Cover
Forest
Shrubland/herbaceous
Planted/cultivated
Developed
Water/wetland
Others


Wildland Vegetation Cover
(per Census block, %)
75-100
50-74
25-49
0-24

Wisconsin

Eastern Region



Wildland-Urban Interface (WUI)

- Interface
- Intermix

Non-WUI Vegetated

- No housing
- Very low housing density

Non-vegetated or Agriculture

- Low and very low housing density
- Medium and high housing density
- Water

- County border
- Highway

0 50 100 km

For more information on the maps and data presented here, please refer to page 20.

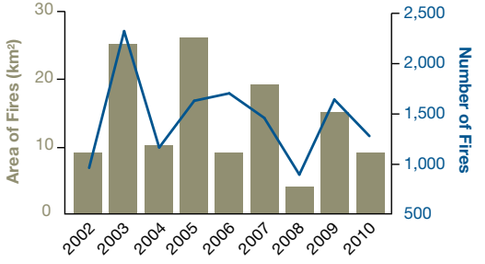
Population and Geography Overview

Census Data	Number	%
Population	5,686,986	
Housing units	2,624,358	
Seasonal use	193,046	7

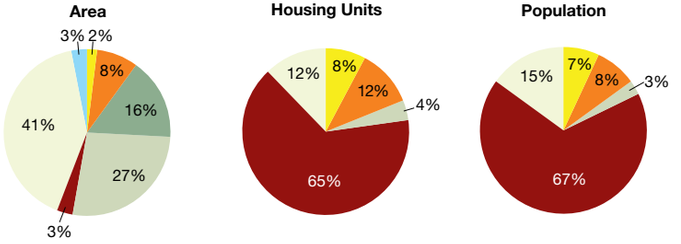
Land Ownership	Area (km²)	%
Public-Federal	7,525	5
Public-State	5,787	4
Public-Local	9,837	7
Private	122,292	84

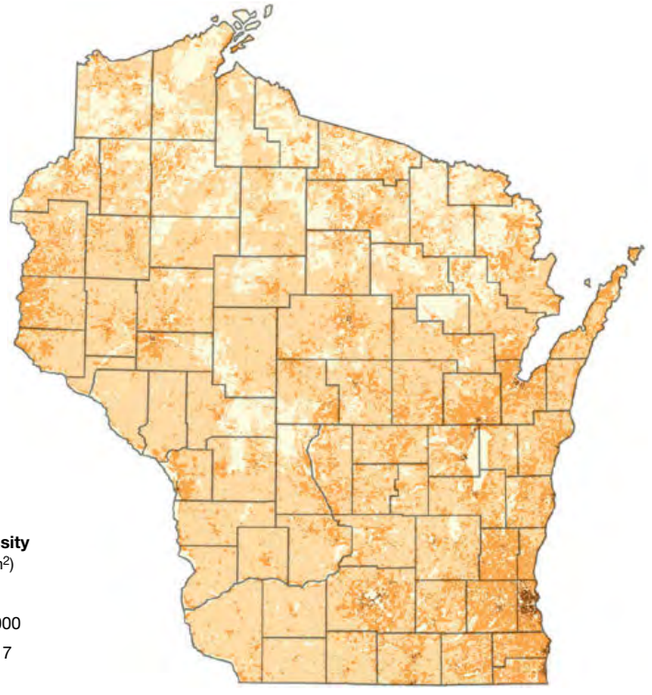
Land Cover	Area (km²)	%
Forest	52,257	36
Shrubland/herbaceous	3,785	3
Planted/cultivated	53,766	37
Developed	10,431	7
Water/wetland	25,100	17
Others	100	0
Total area	145,440	

Wildfire History

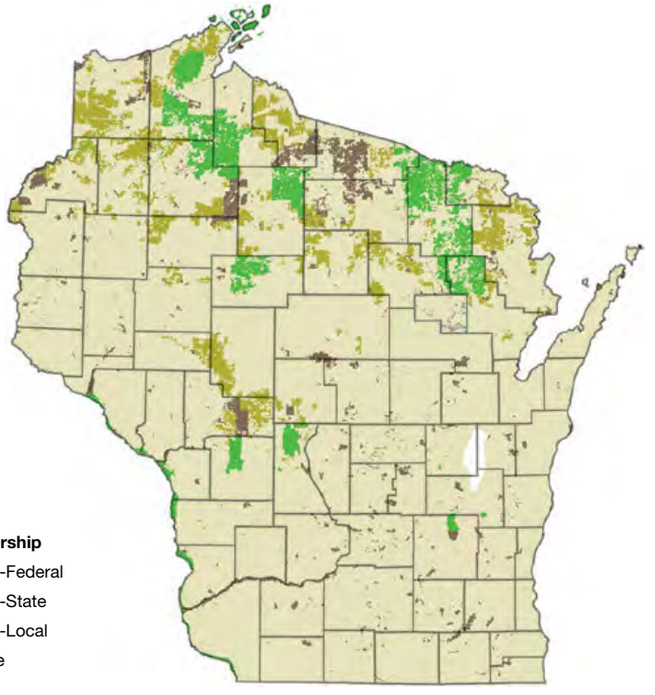


WUI in Numbers (see legend)

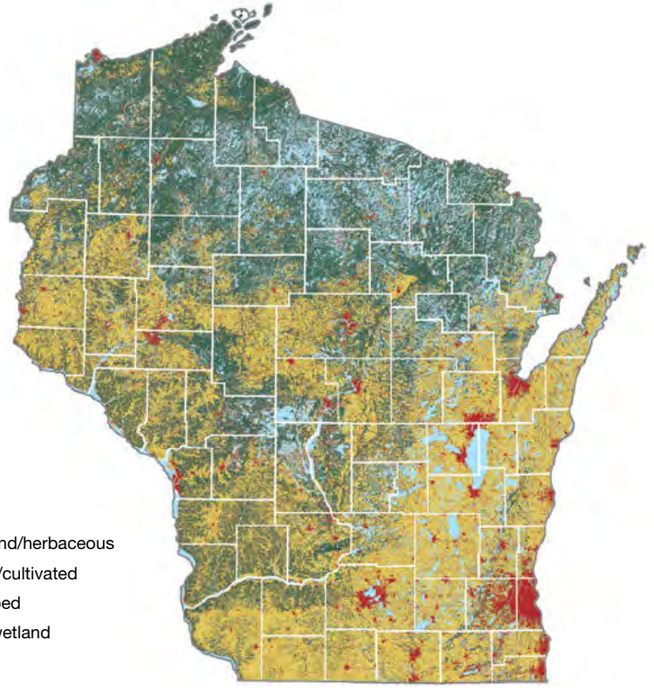




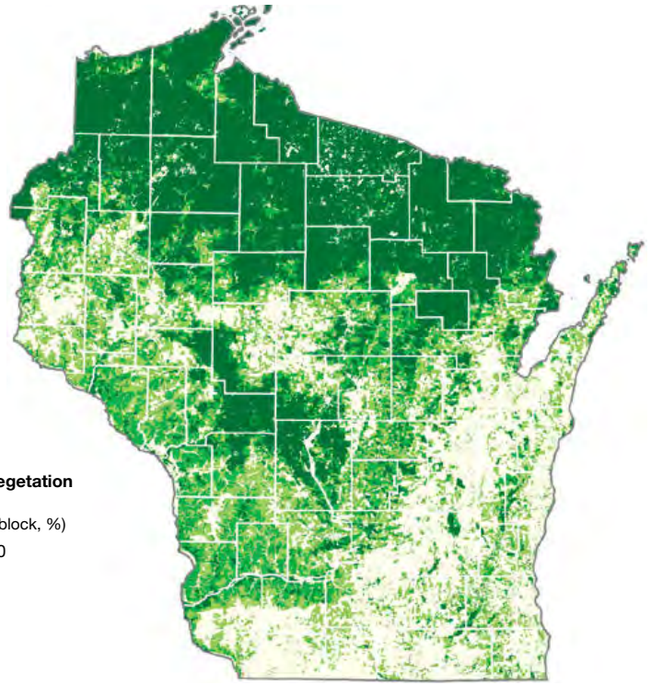
Housing Density
(houses per km^2)
- >1,000
- 6.18-1,000
- 0.01-6.17
- 0



Land Ownership
- Public-Federal
- Public-State
- Public-Local
- Private



Land Cover
- Forest
- Shrubland/herbaceous
- Planted/cultivated
- Developed
- Water/wetland
- Others



Wildland Vegetation Cover
(per Census block, %)
- 75-100
- 50-74
- 25-49
- 0-24

Literature Cited

Alig, R.J.; Stewart, S.I.; Nowak, D.; Wear, D.; Stein, S. 2010. **Threats from conversions of forest lands: Trends, determinants, and policy considerations.** In: Pye, J.M.; Rauscher, H.M.; Sands, Y.; Lee, D.C.; Beatty, J.S., tech. eds. Advances in threat assessment and their application to forest and rangeland management. Gen. Tech. Rep. PNW-GTR-802. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest and Southern Research Stations. 708 p. 2 vol.

Bar Massada, A.R.; Radeloff, V.C.; Stewart, S.I. 2014. **Biotic and abiotic effects of human settlements in the wildland-urban interface.** BioScience. 64(5): 429-437.

Bar Massada, A.; Radeloff, V.C.; Stewart, S.I.; Hawbaker, T.J. 2009. **Wildfire risk in the wildland–urban interface: A simulation study in northwestern Wisconsin.** Forest Ecology and Management. 258: 1990-1999.

Brabec, E.S.; Schulte, S.; Richards, P.L. 2002. **Impervious surfaces and water quality: A review of current literature and its implications for watershed planning.** Journal of Planning Literature. 16: 499-514.

Bright, A.D.; Burtz, R.T. 2006. **Firewise activities of full-time versus seasonal residents in the wildland-urban interface.** Journal of Forestry. 104: 307-315.

Brown, D.G.; Johnson, K.M.; Loveland, T.R.; Theobald, D.M. 2005. **Rural land use trends in the conterminous United States, 1950-2000.** Ecological Applications. 15: 1851-1863.

California Fire Alliance. 2001. **Characterizing the fire threat to wildland-urban interface.** Sacramento, CA: California Fire Alliance. 75 p.

Conservation Biology Institute. 2010. **Protected areas database PAD-US 1.1 CBI edition.** http://consbio.org/products/projects/pad-us-cbi-edition. Corvallis, OR: Conservation Biology Institute.

Fry, J.; Xian, G.; Jin, S.; Dewitz, J.; Homer, C.; Yang, L.; Barnes, C.; Herold, N.; Wickham, J. 2011. **Completion of the 2006 National Land Cover Database for the conterminous United States. Photogrammetric Engineering & Remote Sensing.** 77(9): 858-864.

Gavier-Pizarro, G.I.; Radeloff, V.C.; Stewart, S.I.; Huebner, C.D.; Keuler, N.S. 2010. **Housing is positively associated with invasive exotic plant species richness in New England, USA.** Ecological Aplications. 20: 1913-1925.

Hammer, R.B.; Stewart, S.I.; Radeloff, V.C. 2009. **Demographic trends, the wildland–urban interface, and wildfire management.** Society and Natural Resources. 22: 777-782.

Hull, R.S.; Stewart, S.I. 2002. **Social consequences of change: Implications for forests and forestry.** In: Macie, E.A.; Hermansen, L.A., eds. Human influences on forest ecosystems: the southern wildland-urban interface assessment. Gen. Tech. Rep. SRS-55. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 115-127.

Johnson, K.M.; Nucci, A.; Long, L. 2005. **Population trends in metropolitan and nonmetropolitan America: Selective deconcentration and the rural rebound.** Population Research and Policy Review. 10: 527-542.

Kramer, M.G. 2013. **Our built and natural environments: A technical review of the interactions among land use, transportation, and environmental quality.** Washington, DC: U.S. Environmental Protection Agency.

Lepczyk, C.A.; Mertig, A.G.; Liu, J. 2004. **Landowners and cat predation across rural-to-urban landscapes.** Biological Conservation. 115: 191-201.

Martinuzzi, S.; Stewart, S.I.; Helmers, D.P.; Mockrin, M.H.; Hammer, R.B.; Radeloff, V. C. 2015. **The 2010 wildland-urban interface of the conterminous United States – geospatial data.** Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Forest Service Research Data Archive. http://dx.doi.org/10.2737/RDS-2015-0012.

National Fire Protection Association [NFPA]. 2014. **About Firewise.** Quincy, MA: National Fire Protection Association. http://www.firewise.org/ (accessed 28 October 2014).

National Interagency Fire Center [NIFC]. 2014. **Historical year-end fire statistics by state.** Boise, ID: National Interagency Fire Center. http://www.nifc.gov/fireInfo/fireInfo_statistics.html (accessed 28 October 2014).

Paveglio, T.B.; Jakes, P.J.; Carroll, M.S.; Williams, D.R. 2009. **Understanding social complexity within the wildland–urban interface: a new species of human habitation?** Environmental Management. 43: 1085-1095.

Radeloff, V.C.; Hammer, R.B.; Stewart, S.I. 2005a. **Rural and suburban sprawl in the US Midwest from 1940 to 2000 and its relation to forest fragmentation.** Conservation Biology. 19: 793-805.

Radeloff, V.C.; Hammer, R.B.; Stewart, S.I.; Fried, J.S.; Holcomb, S.S.; McKeefry, J.F. 2005b. **The wildland-urban interface in the United States.** Ecological Applications. 15: 799-805.

Stewart, S.I.; Mockrin, M.H.; Hammer, R.B. 2012. **Linking human and natural systems in the planning process.** In: Laband, D.N.; Lockaby, B.G.; Zipperer, W., eds. Urban-rural interfaces: linking people and nature. Madison, WI: American Society of Agronomy; Soil Science Society of America; Crop Science Society of America: 275-286.

Stewart, S.I.; Radeloff, V.C.; Hammer, R.B.; Hawbaker, T.J. 2007. **Defining the wildland-urban interface.** Journal of Forestry. 105: 201-207.

Syphard, A.D.; Radeloff, V.C.; Hawbaker, T.J.; Stewart, S.I. 2009. **Conservation threats due to human-caused increases in fire frequency in Mediterranean-climate ecosystems.** Conservation Biology. 23: 758-769.

Teie, W.C.; Weatherford, B.F. 2000. **Fire in the west: The wildland/urban interface problem.** Report to the Council of Western State Foresters. Rescue, CA: Deer Valley Press. 80 p.

U.S. Census Bureau. 2013. **U.S. Census 2010, Summary File 1.** Washington, DC: U.S. Department of Commerce, Census Bureau, Geography Division. http://www2.census.gov/census_2010/04-Summary_File_1.

Winter, G.J.; Vogt, C.; Fried, J.S. 2002. **Fuel treatments at the wildland-urban interface: common concerns in diverse regions.** Journal of Forestry. 100: 15-21.

Martinuzzi, Sebastián; Stewart, Susan I.; Helmers, David P.; Mockrin, Miranda H.; Hammer, Roger B.; Radeloff, Volker C. 2015. **The 2010 wildland-urban interface of the conterminous United States.** Research Map NRS-8. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 124 p. [includes pull-out map].

The wildland-urban interface (WUI) is the area where structures and other human development meet or intermingle with undeveloped wildland, and it is where wildfires have their greatest impacts on people. Hence the WUI is important for wildfire management. This document and associated maps summarize the extent of the WUI in the conterminous United States in 2010. The maps and summary statistics are designed to inform both national policy and local land management concerning the WUI. The data presented here summarize the 2010 WUI at a national scale and for each of the 48 conterminous States. All products of this assessment—including maps, statistics, and the WUI GIS dataset—are available at http://www.nrs.fs.fed.us/data/WUI.

KEY WORDS: fragmentation, housing growth, urban sprawl, urbanization, wildfire.

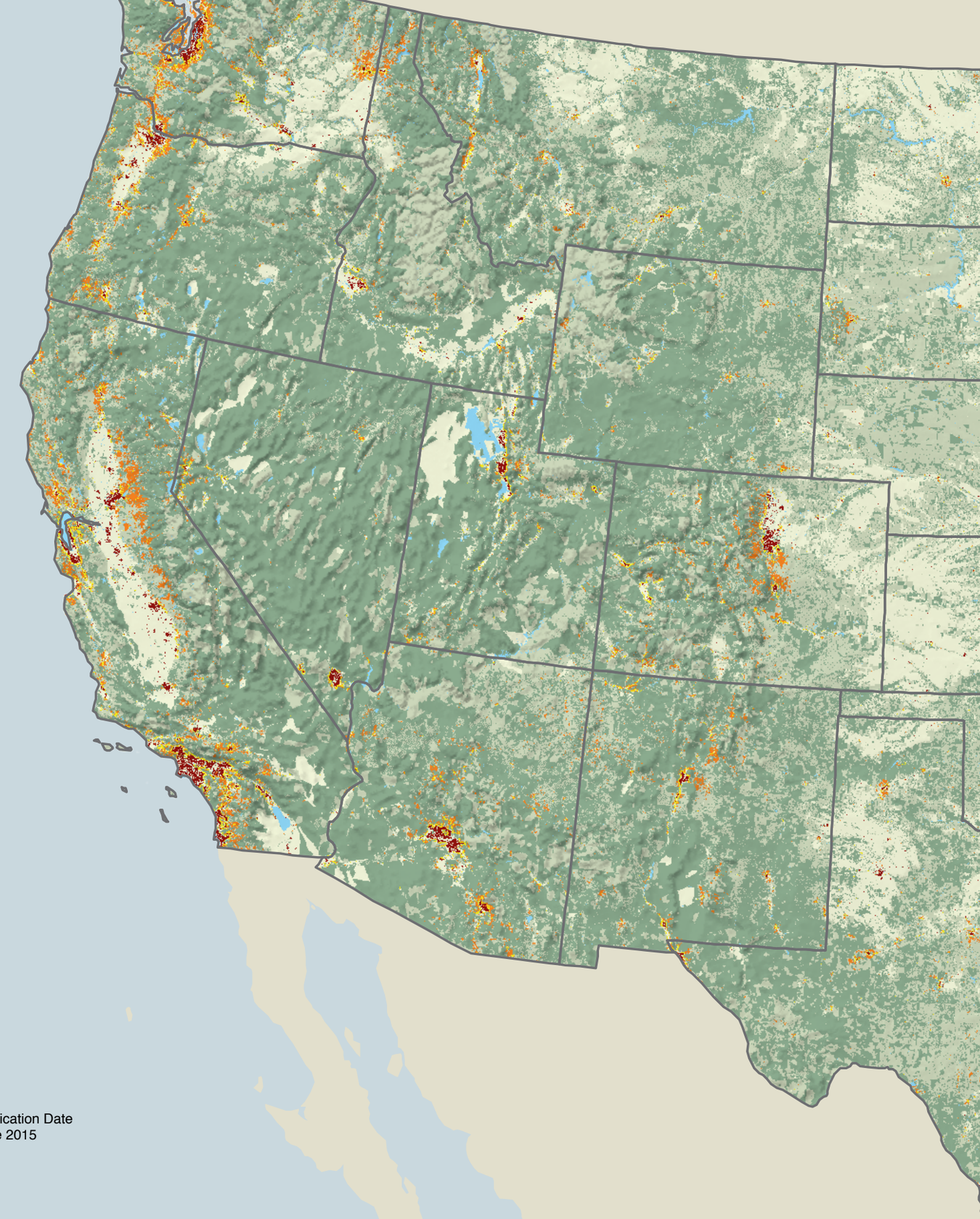
Manuscript received for publication September 2014

Published by:
U.S. FOREST SERVICE
11 CAMPUS BLVD SUITE 200
NEWTOWN SQUARE PA 19073-3294

For additional copies:
U.S. Forest Service
Publications Distribution
359 Main Road
Delaware, OH 43015-8640

June 2015

Visit our homepage at: **http://www.nrs.fs.fed.us**



The wildland-urban interface (WUI) is the area where structures and other human development meet or intermingle with undeveloped wildland, and it is where wildfires have their greatest impacts on people. Hence the WUI is important for wildfire management. This document and associated maps summarize the extent of the WUI in the conterminous United States in 2010. The maps and summary statistics are designed to inform both national policy and local land management concerning the WUI. The data presented here summarize the 2010 WUI at a national scale and for each of the 48 conterminous States. All products of this assessment—including maps, statistics, and the WUI GIS dataset—can be accessed at http://www.nrs.fs.fed.us/data/WUI.

Forest Service **Northern Research Station** Research Map NRS-8 Publication Date June 2015