

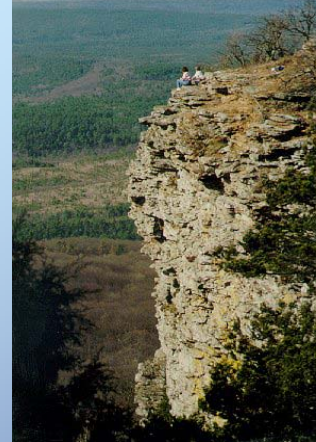
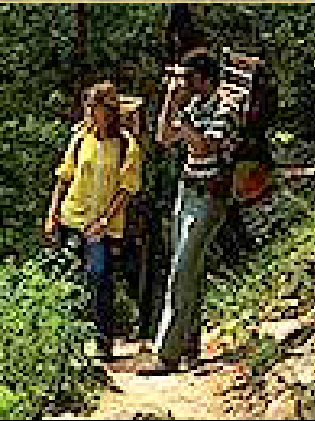
Recreation and Tourism Trends Research

RWU-4901, ATHENS, GA, USA

SRS



www.srs.fs.fed.us/trends



Our Mission

Forestry Sciences Laboratory
Athens, Georgia USA

Provide up-to-date information on trends in public demands, perceptions, and benefits of nature-based tourism and outdoor recreation and describe how local community conditions and broad-scale demographic shifts will affect these demands

Primary Methods of Research



- Broad-scale (region-wide and countrywide) assessments of societal and natural resources change
- Study the economic and resource impacts of nature-based recreation and tourism
- Survey the public and on-site visitors, especially studying recreation that occurs on public lands

POPULATION, RECREATION, AND OTHER TRENDS IN THE UNITED STATES



Topics:

- **U.S. public lands emerge**
- Population growth, *the* story of the 21st Century
- Outdoor recreation—long term and recent trends
- Outdoor recreation in 21st Century United States
- Growth and public lands
- Emphasis studies planned
- Summary and conclusions

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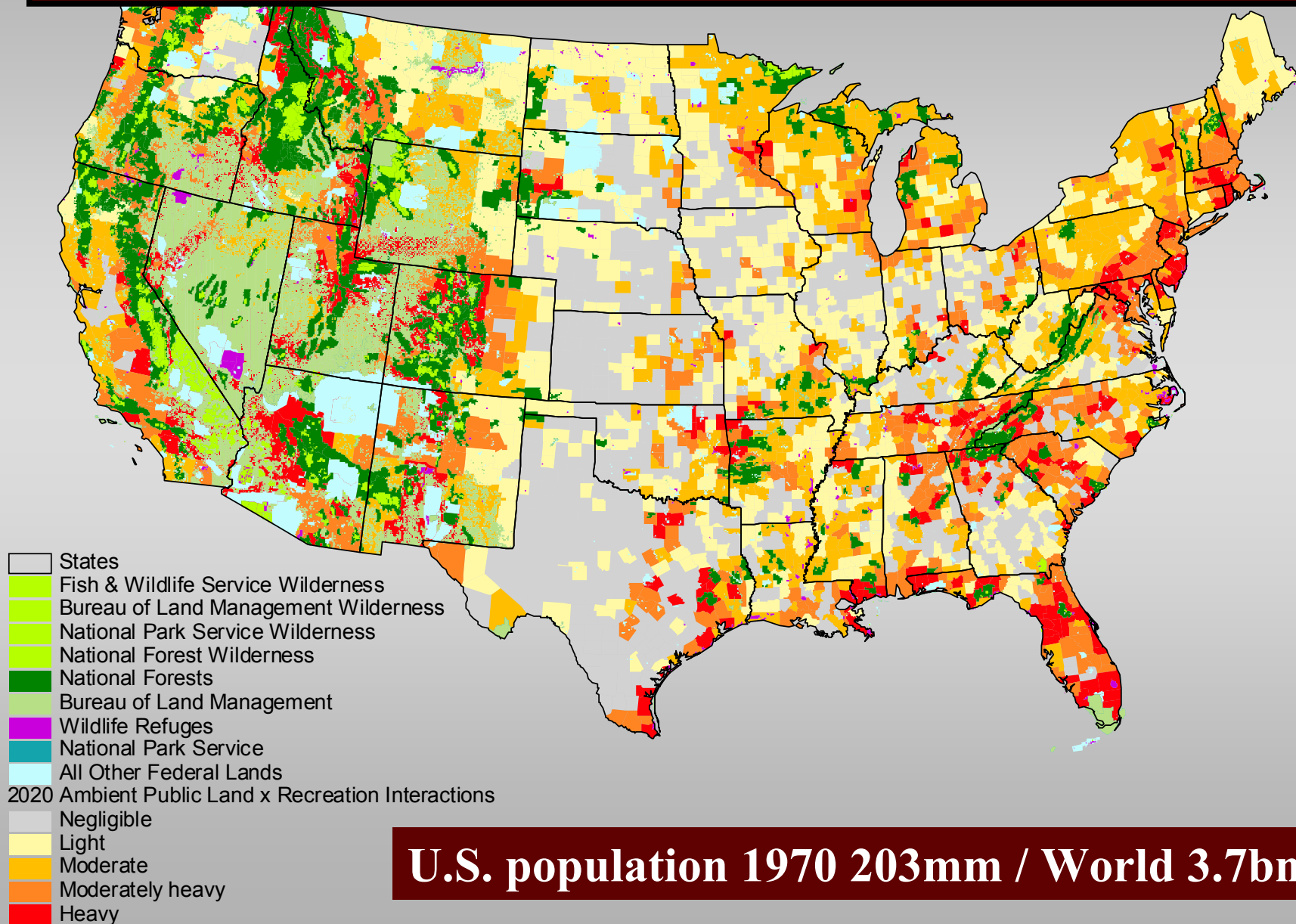


POPULATION, RECREATION, AND OTHER TRENDS IN THE UNITED STATES



Abbreviated results from our research under each topic are presented in this presentation. Full coverage of results can be found in publications or reports at our web site at www.srs.fs.fed.us/trends. Questions can be addressed to Ken Cordell at kcordell@fs.fed.us. There are two primary publications available from Venture Publishers. These are books entitled: *Outdoor Recreation for 21st Century America* and *The Multiple Values of Wilderness*.

As population was added and the U.S. matured, a rich system of public lands was added



U.S. population 1970 203mm / World 3.7bn

POPULATION, RECREATION, AND OTHER TRENDS IN THE UNITED STATES



Much of our research focuses on public lands

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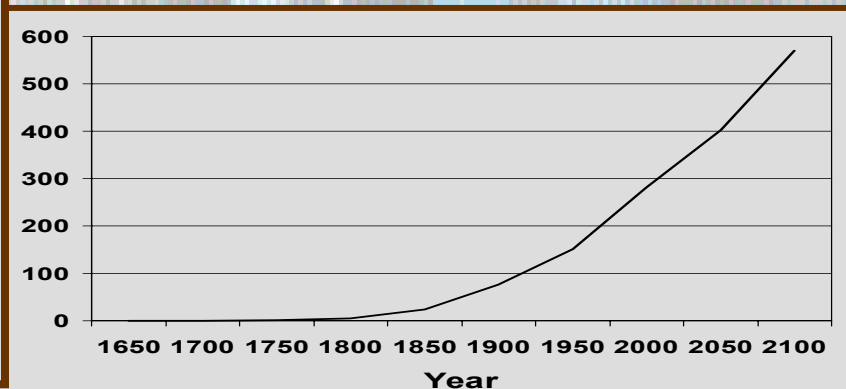
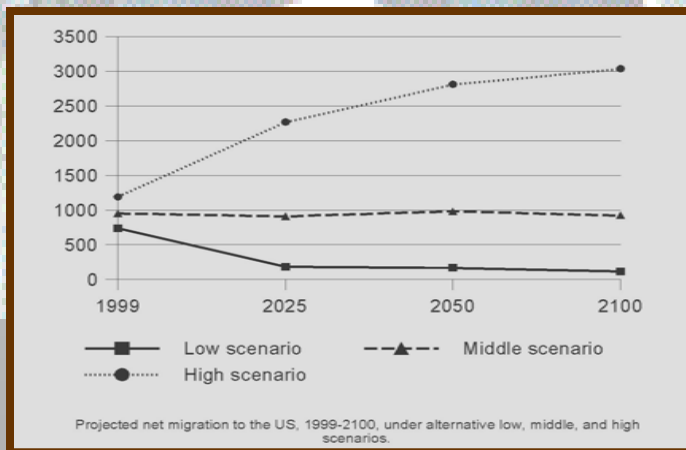
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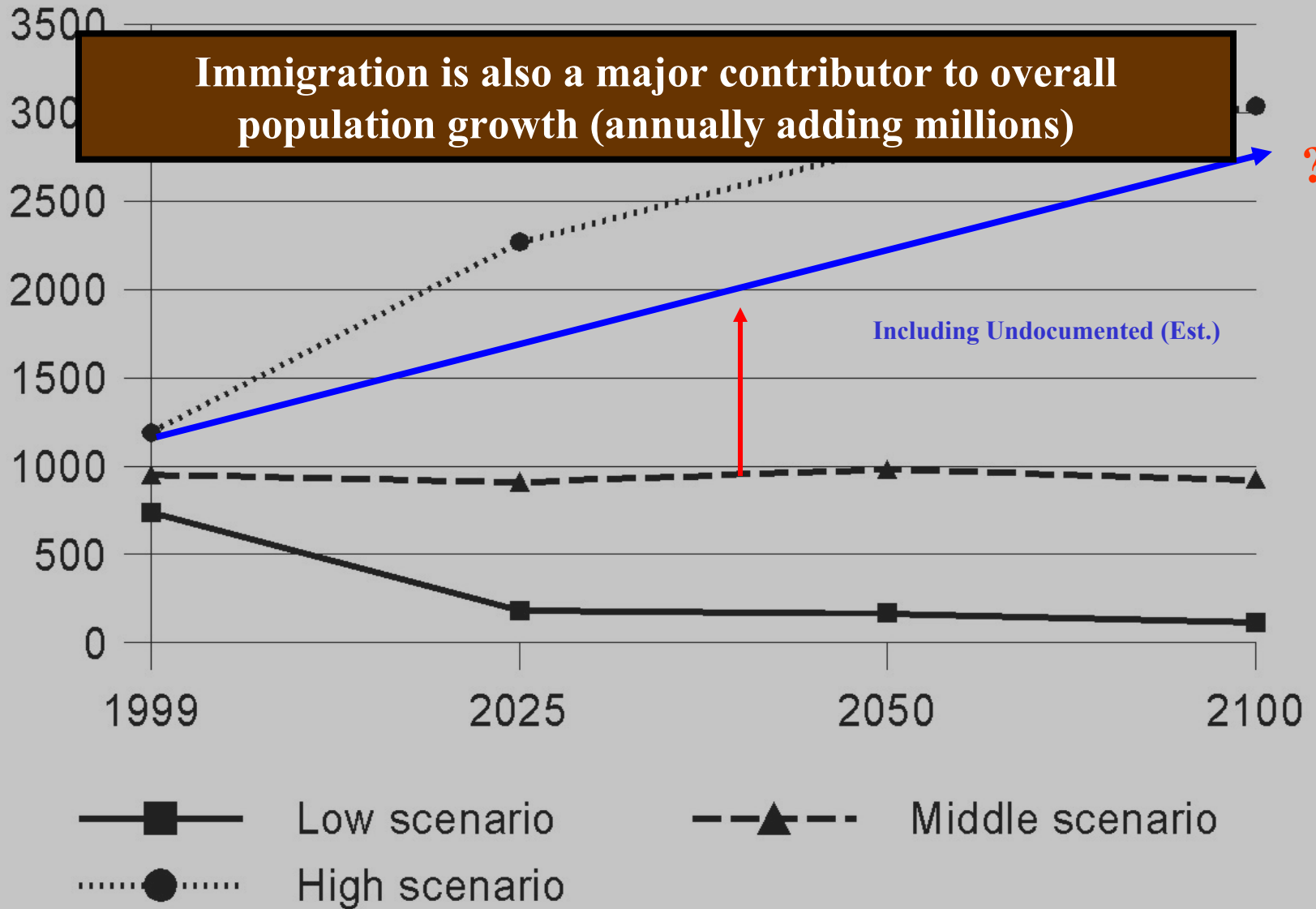
Sharp Top Mountain, VA, USA

As world population expands, so too does the U.S. population

Population Growth = Natural Growth plus Immigration

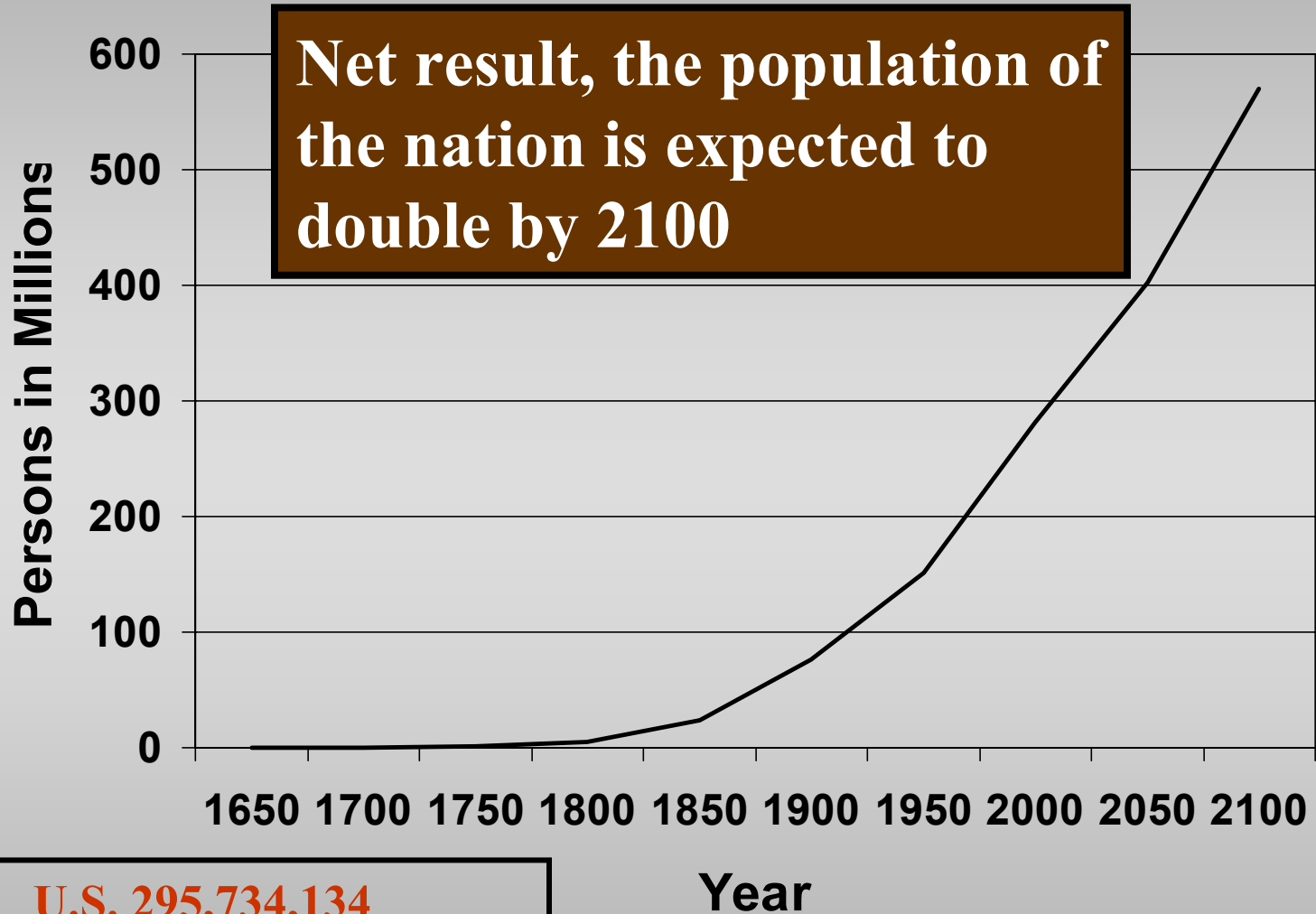


Immigration is also a major contributor to overall population growth (annually adding millions)



Projected net migration to the US, 1999-2100, under alternative low, middle, and high scenarios.

Historical and Projected Population in the U.S.



U.S. 295,734,134
World 6,446,131,400
16:19 GMT (EST+5) Oct. 20, 2005

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Sharp Top Mountain, VA, USA

NSRE

***NATIONAL SURVEY ON
RECREATION AND THE
ENVIRONMENT***

SINCE 1960

***THE UNITED STATES' ON-GOING
NATIONAL RECREATION AND
ENVIRONMENTAL SURVEY***

The NSRE Report

Spring 2004

Outdoor Recreation for 21st Century America

Cordell
Principal Author



VENTURE

Outdoor Recreation for 21st Century America

A Report to the Nation:
The National Survey on Recreation
and the Environment



H. Ken Cordell
Principal Author

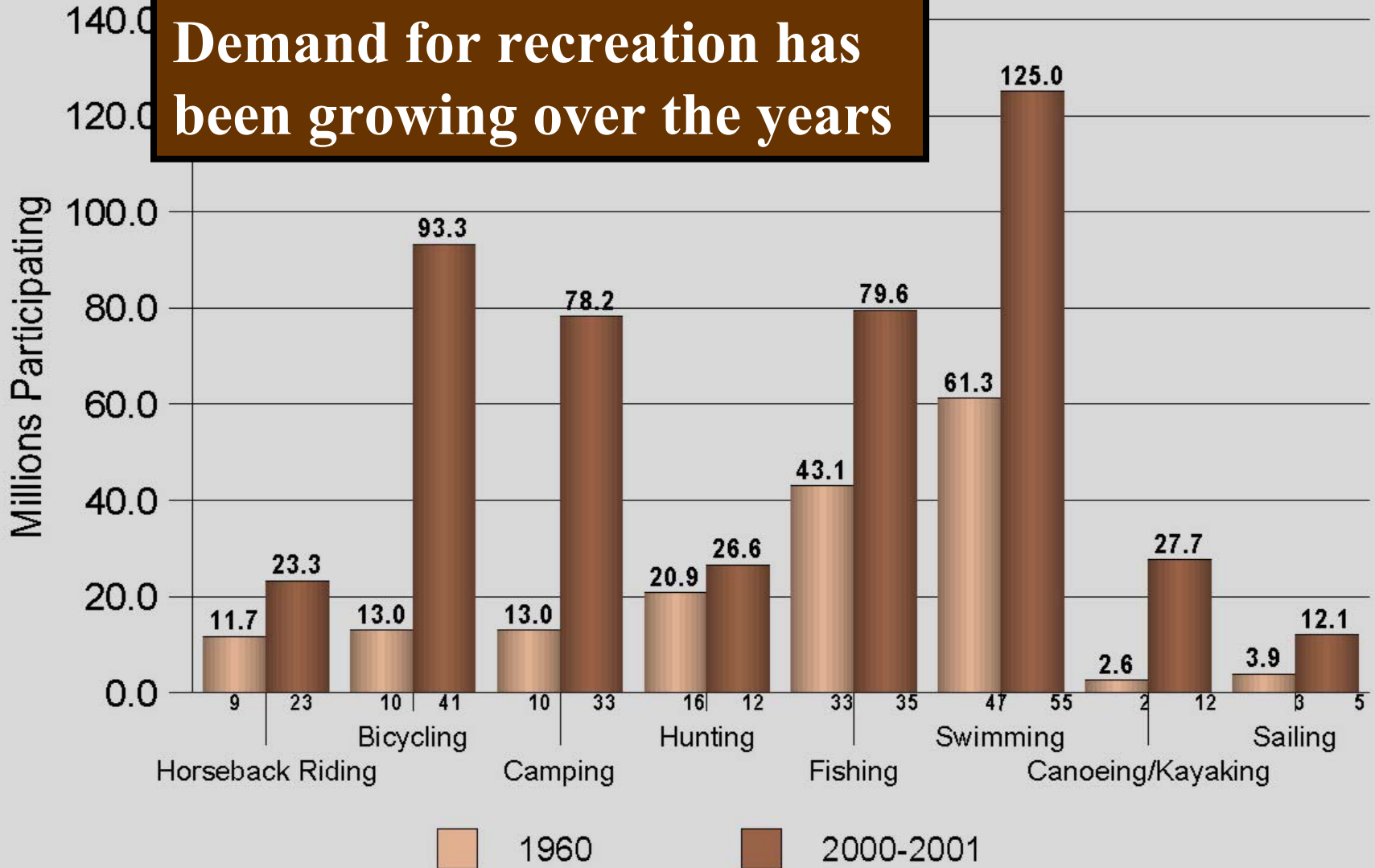


Tuija's new boat!

LONG-TERM
TRENDS

Popularity of selected activities in 1960 and 2000-2001

Demand for recreation has been growing over the years



A group of people on jet skis racing on a large body of water. A bridge is visible in the background.

RECENT

TRENDS

1982-2001

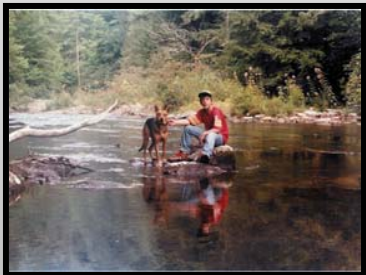
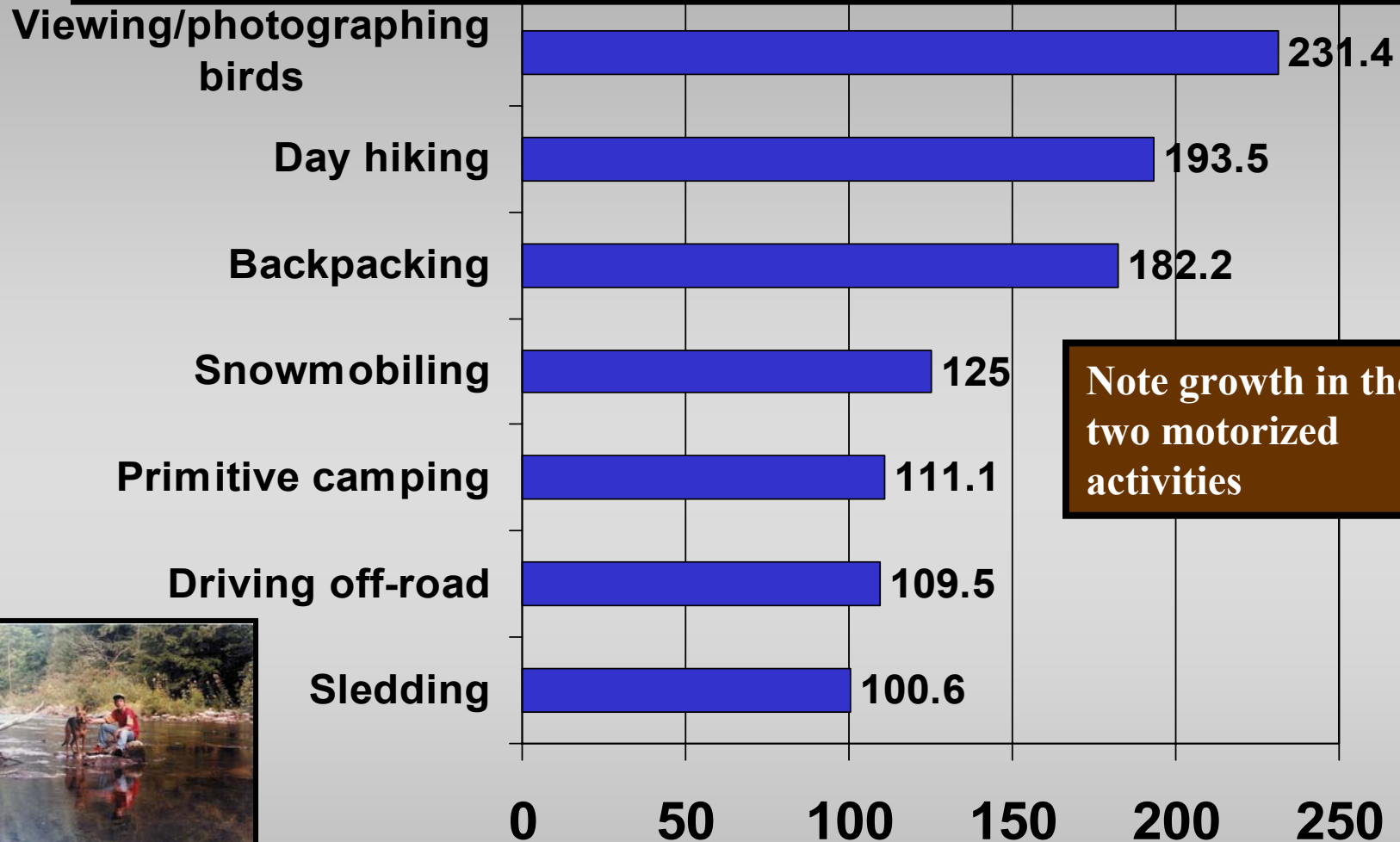
Popularity = Numbers participating

Ten most popular activities in 2000-2001 and popularity ranking in 1994-1995.

Activities	% of Population 16+ Participating (2000-2001)	Rank of Popularity (1994-1995)	% of Population (1994-1995)
Walking for pleasure	83.0	1	66.7
Family gatherings	73.5	2	61.8
Visiting nature centers	57.1	4	53.4
Picnicking	54.5	5	49.1
Sightseeing	51.8	3	56.6
Attending outdoor sports events	49.9	6	47.5
Visiting historic sites	45.6	7	44.1
Viewing/photographing	45.5	8	43.2
Swimming (lakes, streams, rivers)	44.6	9	42.3
Swimming (outdoor pools)	44.5	10	42.2

The more popular activities of the 90s remain popular in the 2000s, but there has been a shifting of order

Growth Percentages—Individual Activities



Percent increase in numbers participating for leading activities, 1982 – 2001. Ranking of bird watching has changed recently.

Percentage change in numbers of participants 16 or older in the United States by activity, 1994 to 2001

Activity	% Change 1994-1995 to 2000-2001	Activity	% Change 1994-1995 to 2000-2001
Kayaking	185.7	Attending outdoor concerts	26.7
Snowboarding	134.8	Basketball outdoors	25.3
Jetskiing	119.3	Primitive camping	24.8
Viewing/photographing fish	96.8	Golfing	23.7
Soccer outdoors	87.2	Small game hunting	21.4
Snowmobiling	70.2	Picnicking	20.9
Ice fishing	59.5	Warmwater fishing	20.9
Sledding	56.2	Migratory bird hunting	20.1
Viewing/photographing wildlife	55.8	Saltwater fishing	19.0
Backpacking	53.8	Tennis outdoors	18.8
Day hiking	51.8	Yard games (e.g., croquet)	16.7
Canoeing	50.7	Sailing	16.6
Bicycling	50.0	Swimming in lakes, streams	16.6
Horseback riding	48.0	Visiting nature centers	16.3
Mountain climbing	46.5	Attending outdoor sports events	14.2
Running or jogging	43.5	Visiting historic sites	13.9
Coldwater fishing	42.8	Rowing	13.6
Ice skating outdoors	42.7	Motorboating	13.2
Surfing	40.4	Downhill skiing	10.5
Developed camping	38.7	Baseball	9.8
Handball/racquetball outdoors	36.8	Snorkeling or scuba diving	9.3
Rafting	36.6	Anadromous fishing	6.2
Driving off-road	36.5	Pool swimming	0.9
Walking for pleasure	35.3	Canoeing	0.3
Visiting archeological sites	30.7	Canoeing	-0.5
Viewing/photographing birds		Canoeing	-0.6
Football		Canoeing	-9.4
Family gatherings		Canoeing	-12.0
Big game hunting		Canoeing	-19.5
Cross-country skiing		Canoeing	-19.5
Rock climbing		Canoeing	-19.5

Motorized activities growing at rapid pace

POPULATION, RECREATION, AND OTHER TRENDS IN THE UNITED STATES



Topics:

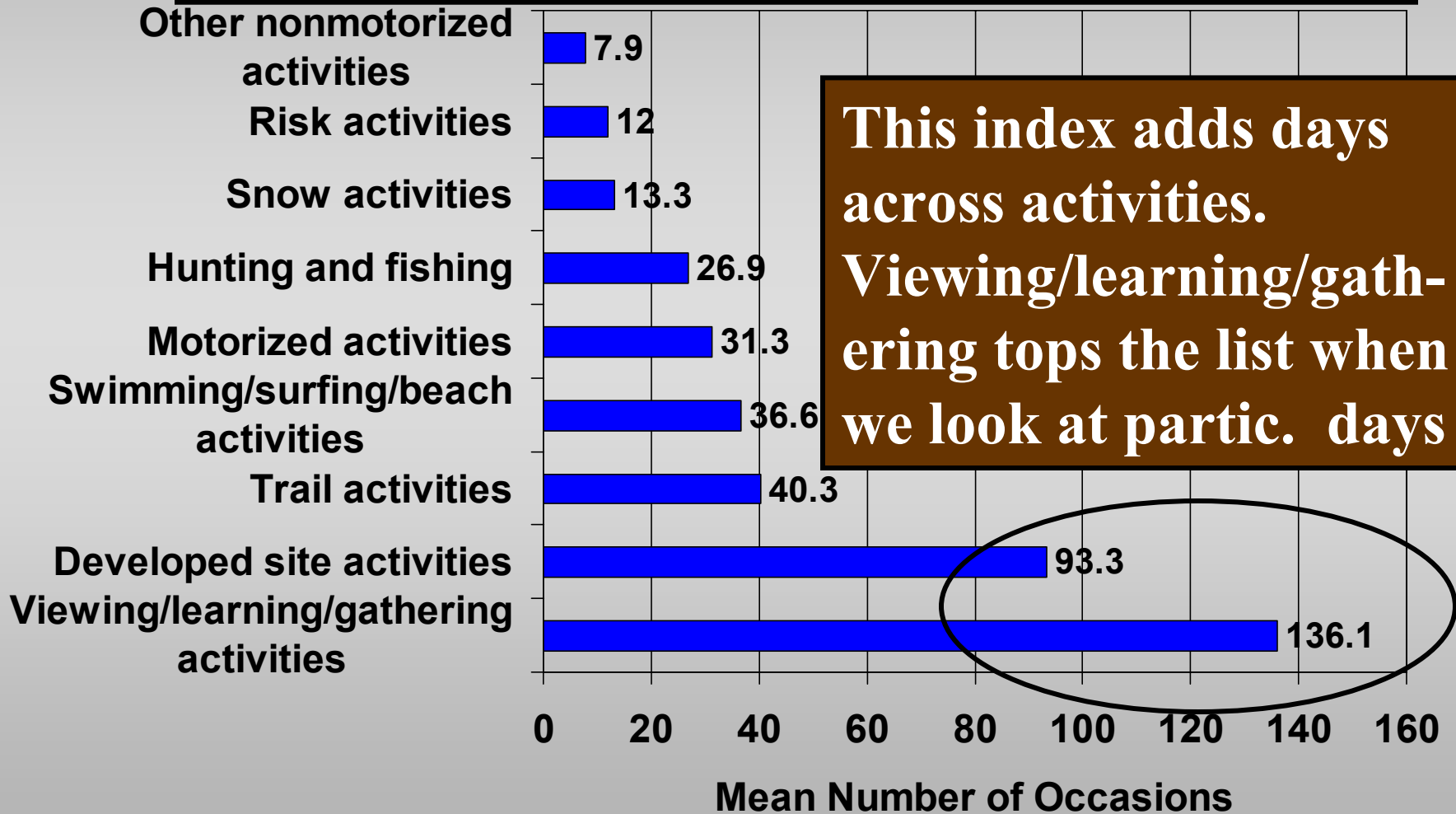
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Current demand

Mean number of occasions of participation by general type of outdoor activity



Percentages of U.S. population by range of days of participation per year in physically active, land-based outdoor activities, 2000-2001

Segmentation based on level of participation

Activity	Percent of Population Who Do Not Participate	Least Active Third		Moderately Active Third		Enthusiasts Most Active Third	
		Percent of Population	Days per Year	Percent of Population	Days per Year	Percent of Population	Days per Year
Day hiking	66.7	11.5	1-4	11.5	5-15	10.4	16-365
Visiting a wilderness or primitive area	67.3	12.5	1-1	9.9	3-6	10.3	7-365
Mountain biking	78.6	7.2	1-5	7.4	6-24	6.8	25-365
Driving off-road	82.5	6.3	1-4	5.9	5-15	5.3	16-365
Big game hunting	91.6	3.0	1-5	2.7	6-14	2.6	15-150
Rock climbing	95.7	1.6	1-1	1.3	2-3	1.4	4-250

Current demand

Participation by enthusiasts accounts for most of the activity days (E.g., 6 of 34 activities, 2000-2001)

Current demand

Activity	Percent of Population who are Enthusiasts	Percent of Total Participation Days by Enthusiasts
Visiting a wilderness or primitive area	10.3	88.9
Day hiking	10.4	88.5
Kayaking	1.2	84.2
Warmwater fishing	7.5	80.6
Downhill skiing	2.6	76.1
Snowboarding	1.5	74.0

The Ultra Enthusiasts are the most active 1/2 of the most active 1/3. Demographics vary by activity for ultra enthusiasts also.

Activity	Minimum Days per Year to Qualify as an Ultra Enthusiast	Percent Male	Percent White, Non-Hispanic	Percent Ages 25 and Under	Percent Ages 45 and Older	Percent Earning \$50,000 or More	Percent Who Live in Metropolitan Areas
Day hiking	52	42.7	41.7	14.8	35.8	35.6	85.0
Mountain biking	50	65.7	76.7	19.6	28.0	45.2	78.6
Driving off-road	30	64.1	85.7	42.3	20.1	56.5	68.9
Horseback riding	30	45.6	85.0	25.0	33.7	41.2	58.6
Big game hunting	24	91.8	96.8	23.3	23.3	48.9	43.4
Visiting a wilderness or primitive area	14	65.4	88.8	28.2	31.0	43.9	68.0
Caving	4	35.7	55.7	37.0	9.5	62.6	80.7

Current demand

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• Growth and public lands

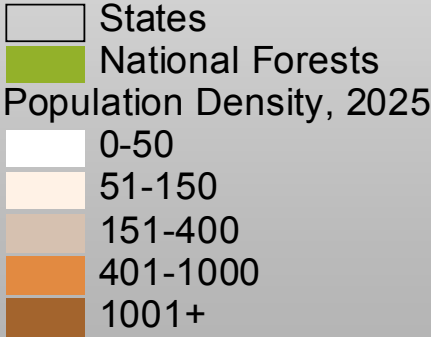
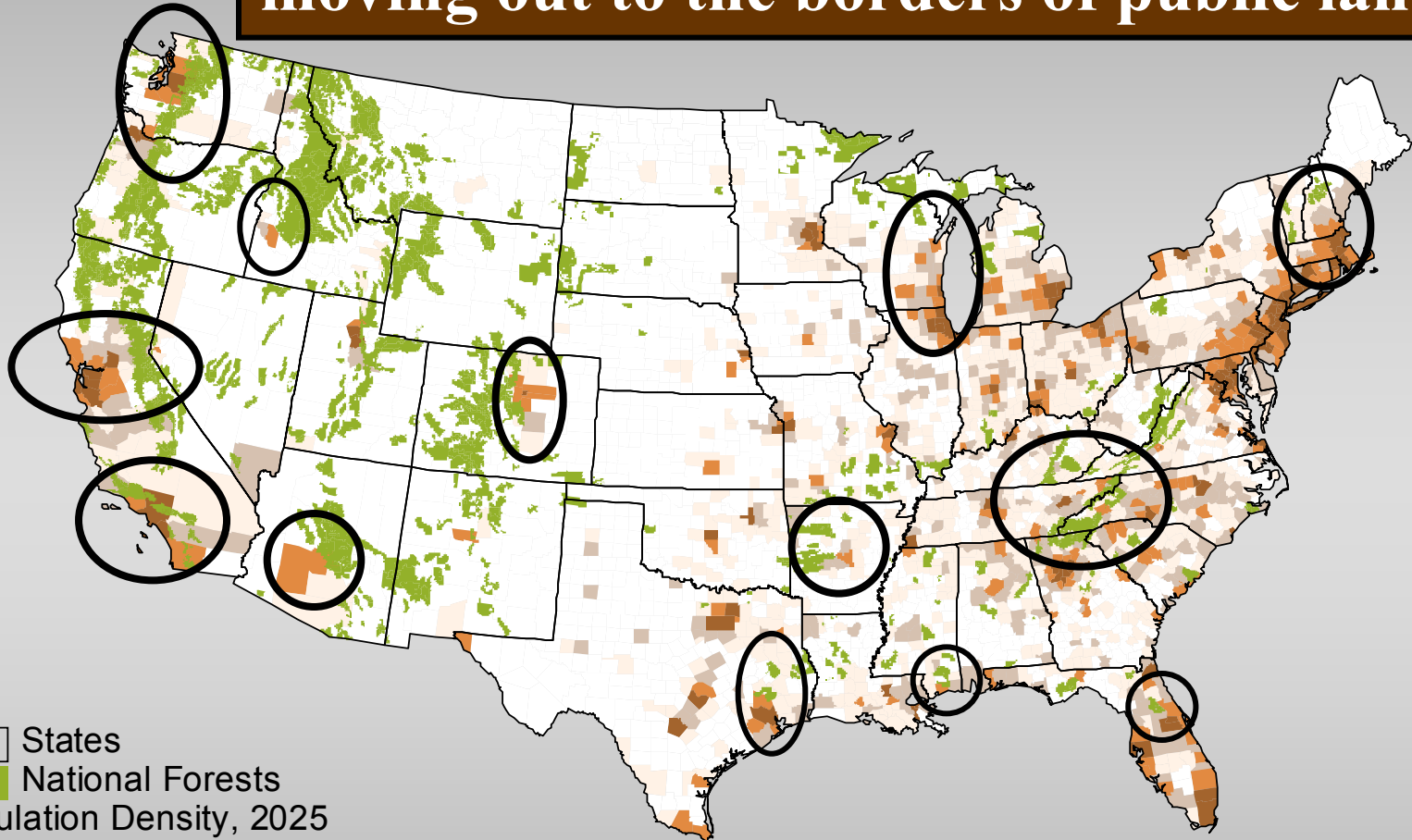
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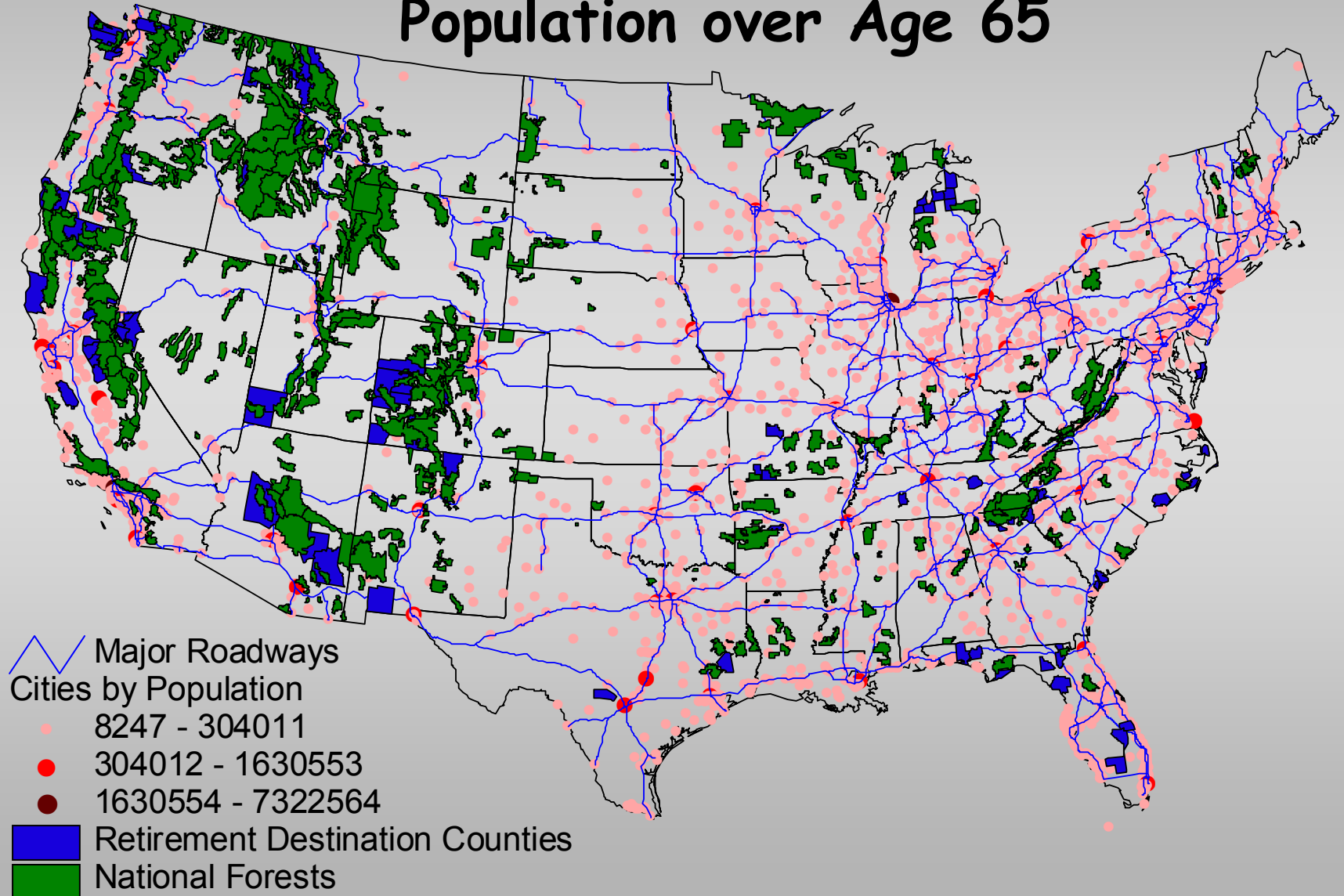
Sharp Top Mountain, VA, USA

Urban population and development are moving out to the borders of public lands

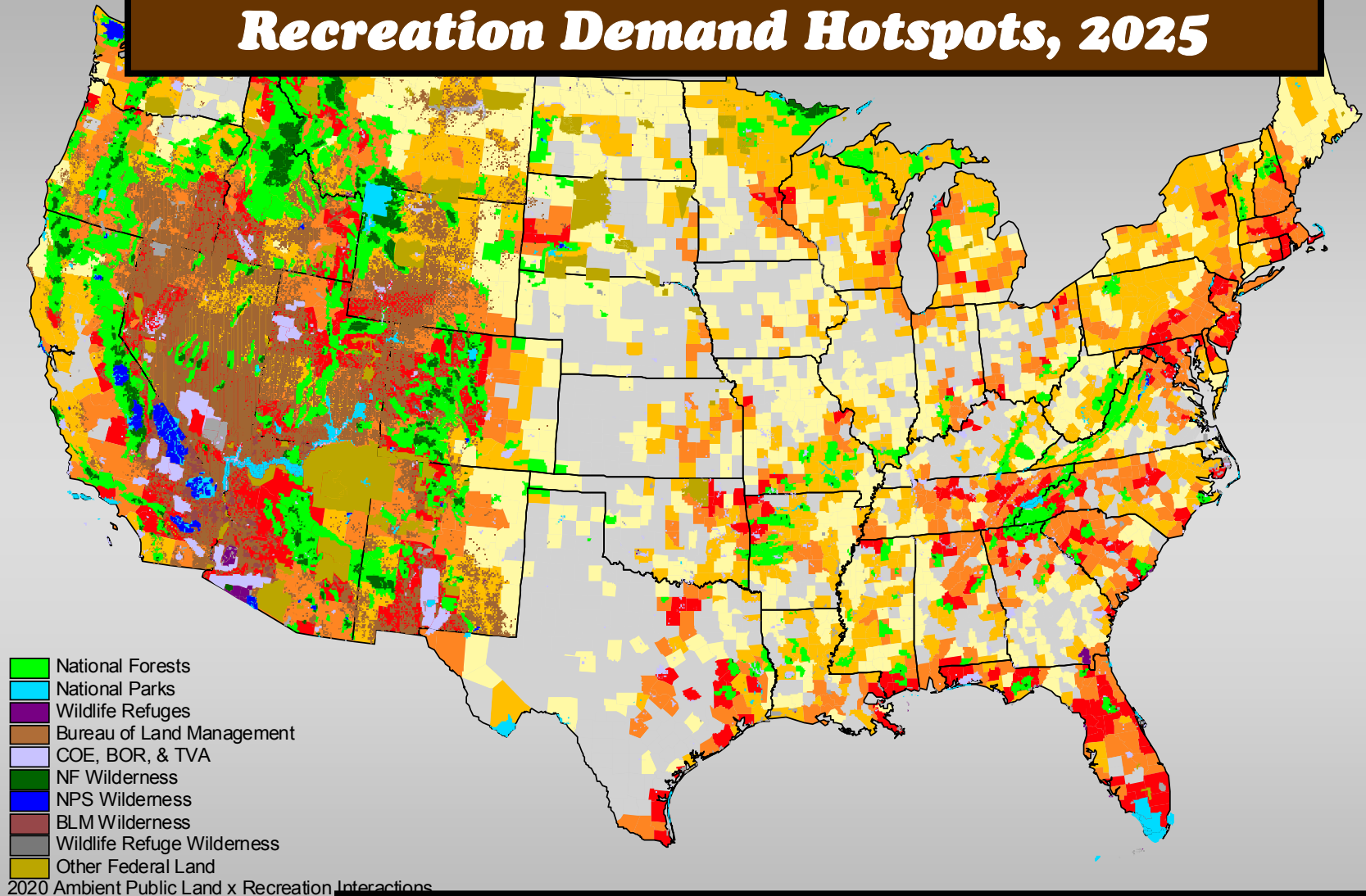


Spatial Relationship of NFs to Heavily Populated Counties 2025

Projected Retirement Destination Counties within Top 20% of Counties Increasing in Population over Age 65



Public Lands Overlaid onto Projected Recreation Demand Hotspots, 2025



As population grows, it spreads across the landscape and ever nearer public lands

WHAT OBJECTIVES DOES THIS INCREASING PUBLIC WANT EMPHASIZED IN THE MANAGEMENT OF NATIONAL FORESTS and OTHER PUBLIC LANDS?



Objectives for Managing National Forests

(Percent in Nation saying important or very important)

Expanding access for motorized vehicles (20%)

Developing trail systems for motorized uses (29%)

Developing trail systems for non-motorized rec. (57%)

Conserving/protecting sources of water (91%)

Designating more wilderness areas (58%)

Developing paved roads for cars (19%)

Preserving resources through

Protecting ecosystems/habitats (86%)

Expanding motorized access, roads and commercial recreation not particularly favored

Expanding commercial recreation (28%)

Informing public on potential environmental impacts (81%)

Objectives for Managing National Forests

(Percent in Nation saying important or very important)

Expanding non-motorized access, protected lands, protected ecosystems and education is favored

Developing trail systems for non-motorized rec. (57%)

Conserving/protecting sources of water (91%)

Designating more wilderness areas (58%)

Developing paved roads for cars (19%)

Preserving resources through policies (75%)

Preserving wilderness experience (74%)

Protecting ecosystems/habitats (86%)

Increasing acres in public land (53%)

Expanding commercial recreation (28%)

Informing public on potential environmental impacts (81%)

POPULATION, RECREATION, AND OTHER TRENDS IN THE UNITED STATES



*What do we need
to be studying in
the future????*

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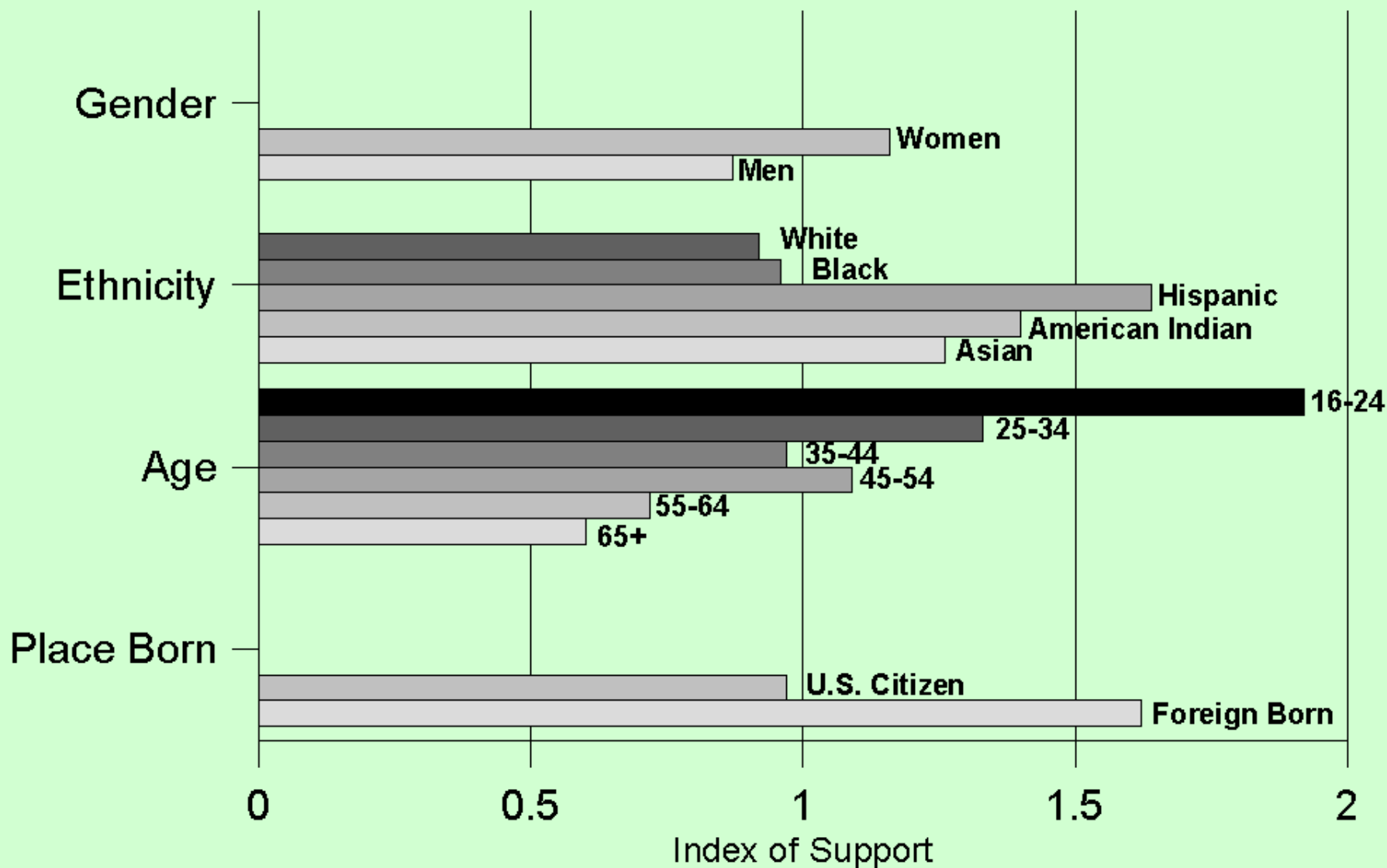
Estimated ratios of percentage of participants to per #1--Ethnic Differences for 10 outdoor activities country.

Group	Walking	Swimming Outdoors	Hiking	Driving Off-road	Downhill Skiing	Big Game Hunting
Percent of Total Population	83.8	43.8	33.4	17.4	8.3	8.2
Race/Ethnicity						
White	1.02	1.15	1.03	1.13	1.20	1.28
Black	1.00	0.49	0.34	0.63	0.33	0.27
American Indian	1.00	1.00	1.14	1.57	1.57	2.00
Asian/ PI	1.08	0.92	0.9			
Hispanic	0.88	0.75	1.4			
Place of Birth						
United States	1.02	1.04	0.9			
Another Country	0.81	0.56	1.6			



The Most Important Benefits of Wilderness

Protecting wildlife habitat



The Motorization of Outdoor Recreation in the USA

- Off Highway Vehicles
- Air Tours and Access
- Personal Water Craft
- Cruises and Tours
- Scenic Driving
- Snow Mobiles



#2--Motorized Recreation

OHV Sales are skyrocketing, as shown by these trends from 1998 to 2003

1998			2003			Percent Change, 1998 vs 2003		
ATV	OHM	Total	ATV	OHM	Total	ATV	OHM	Total
Thousands			Thousands			Percent		
429	128	558	799	313	1,113	86%	143%	99%

Source: Motorcycle Sales Industry Report—proprietary.

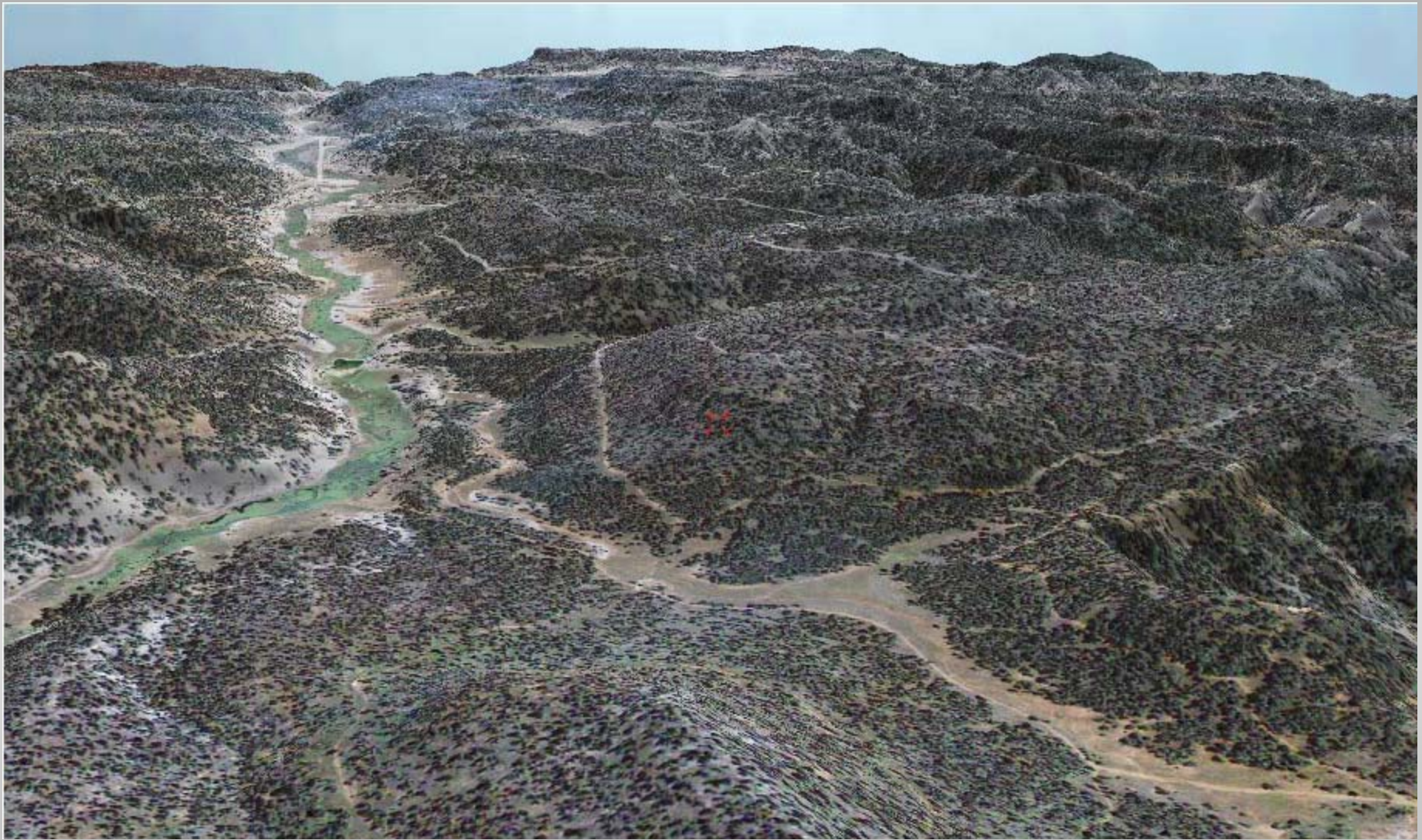


Figure 2—Computer-enhanced view of IKONOS satellite imagery within the Cedar City Ranger District in the Dixie National Forest. The view was created by draping the high-resolution satellite image over a digital elevation model.

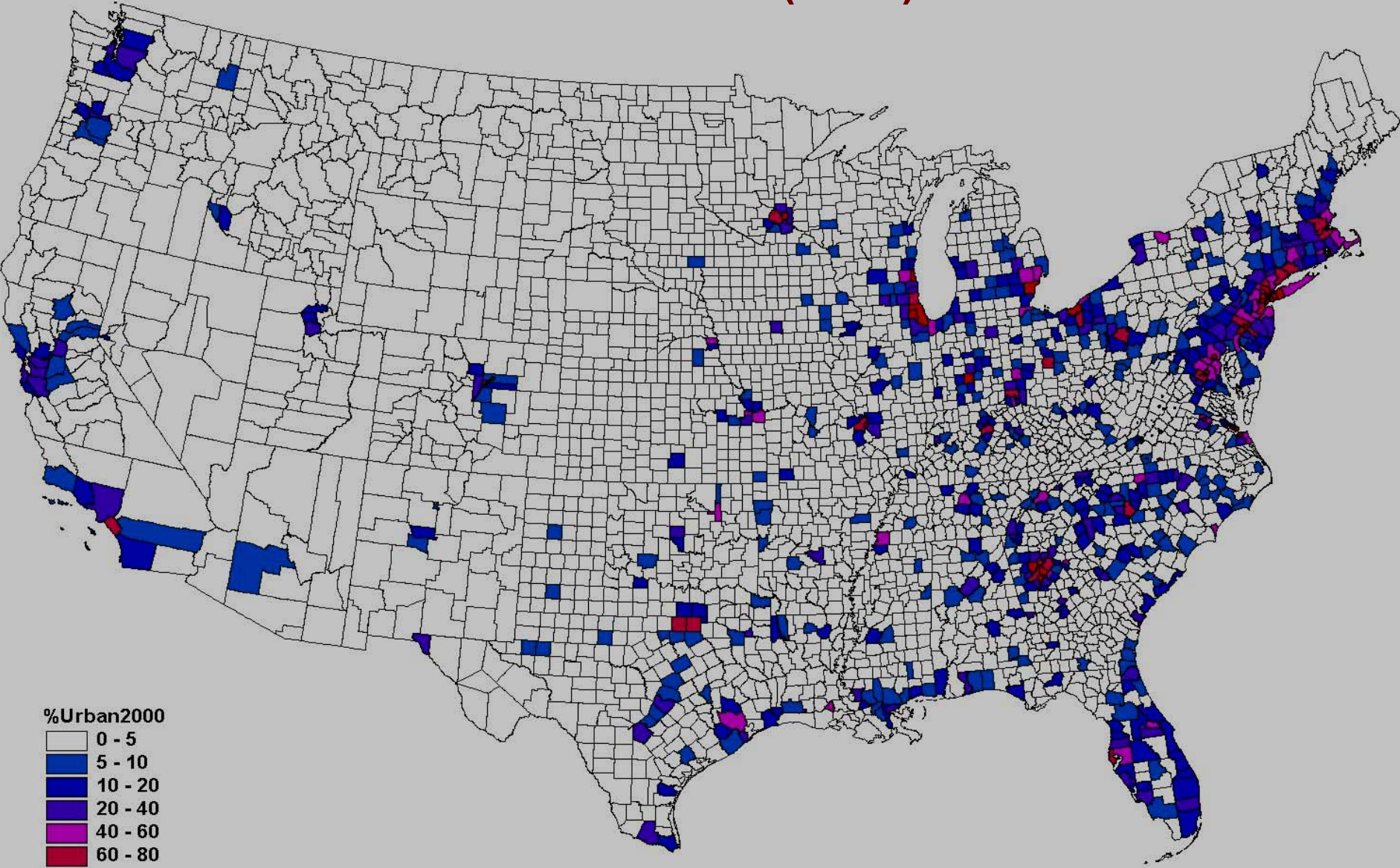
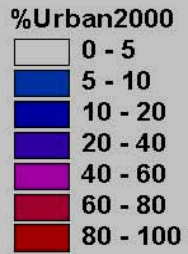
#3--Effects of Urban Sprawl on Recreation Opportunities

- 1990 – 2000: about the area of Vermont and New Hampshire combined
- 2000 – 2050: approx. the area of California



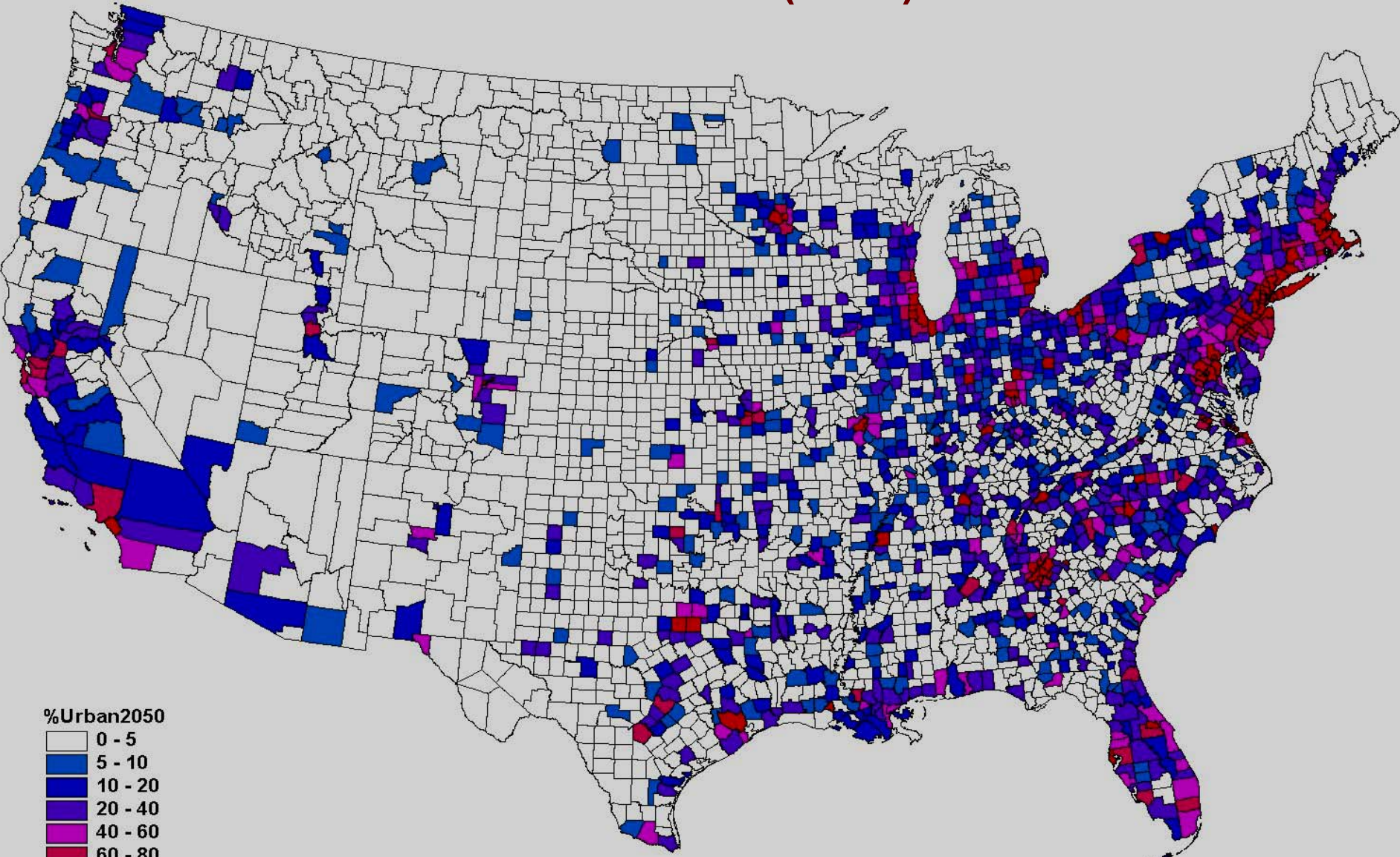


Percent Urban (2000)





Percent Urban (2050)

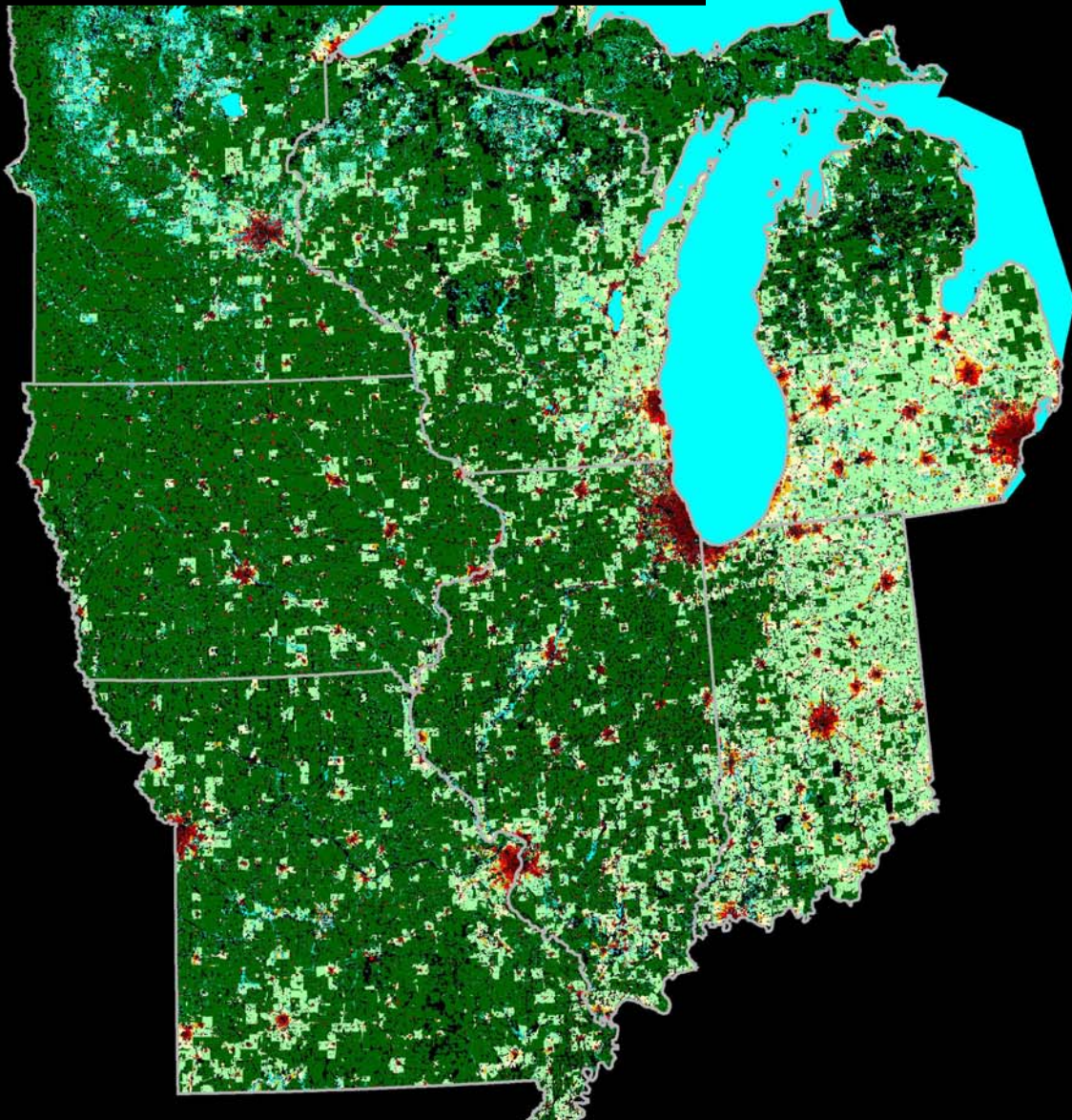


%Urban2050

0 - 5
5 - 10
10 - 20
20 - 40
40 - 60
60 - 80
80 - 100

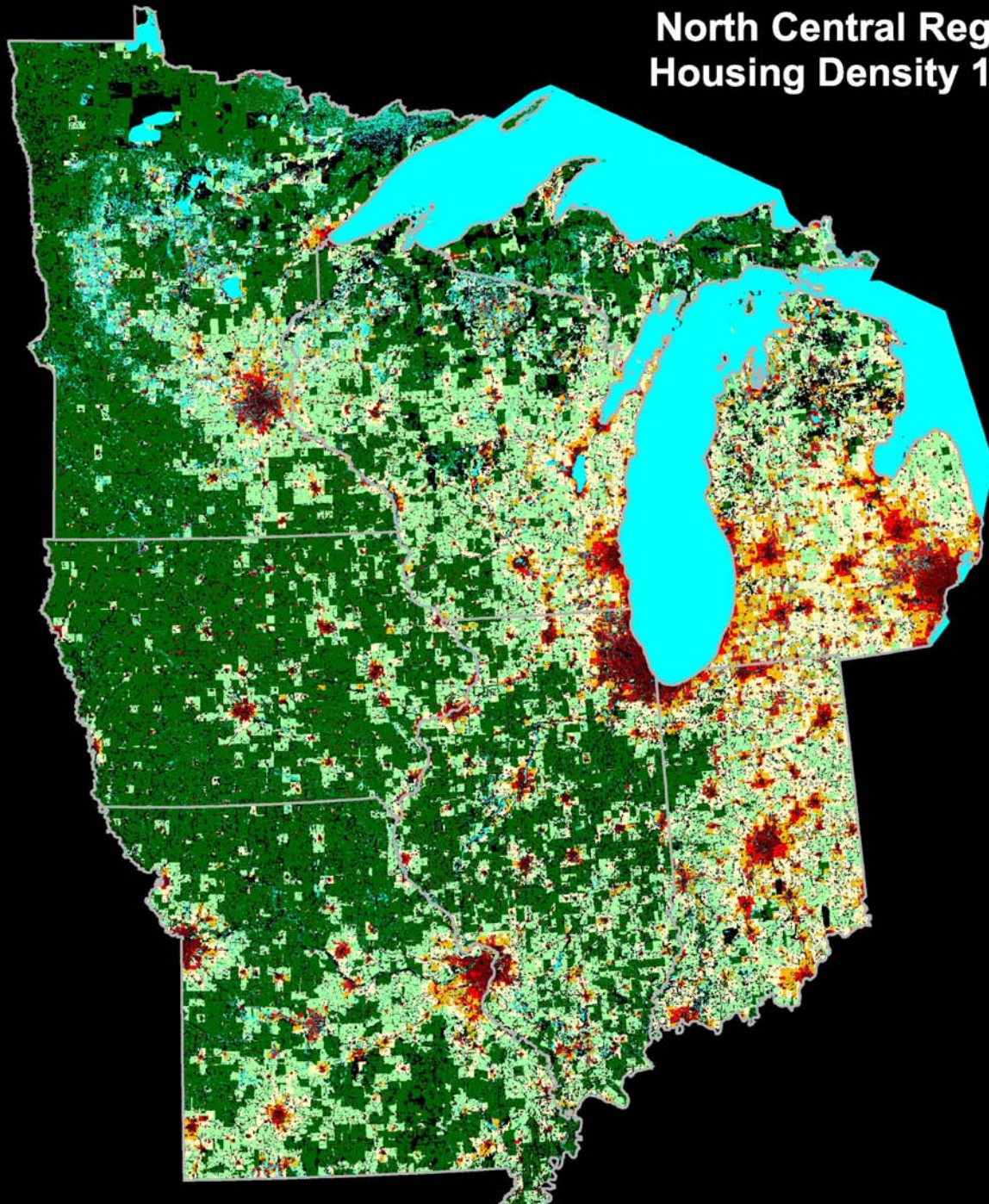
#4—Ex-Urban Land Development Impacts on Recreation Supply

Housing Units
per Sq. Km.



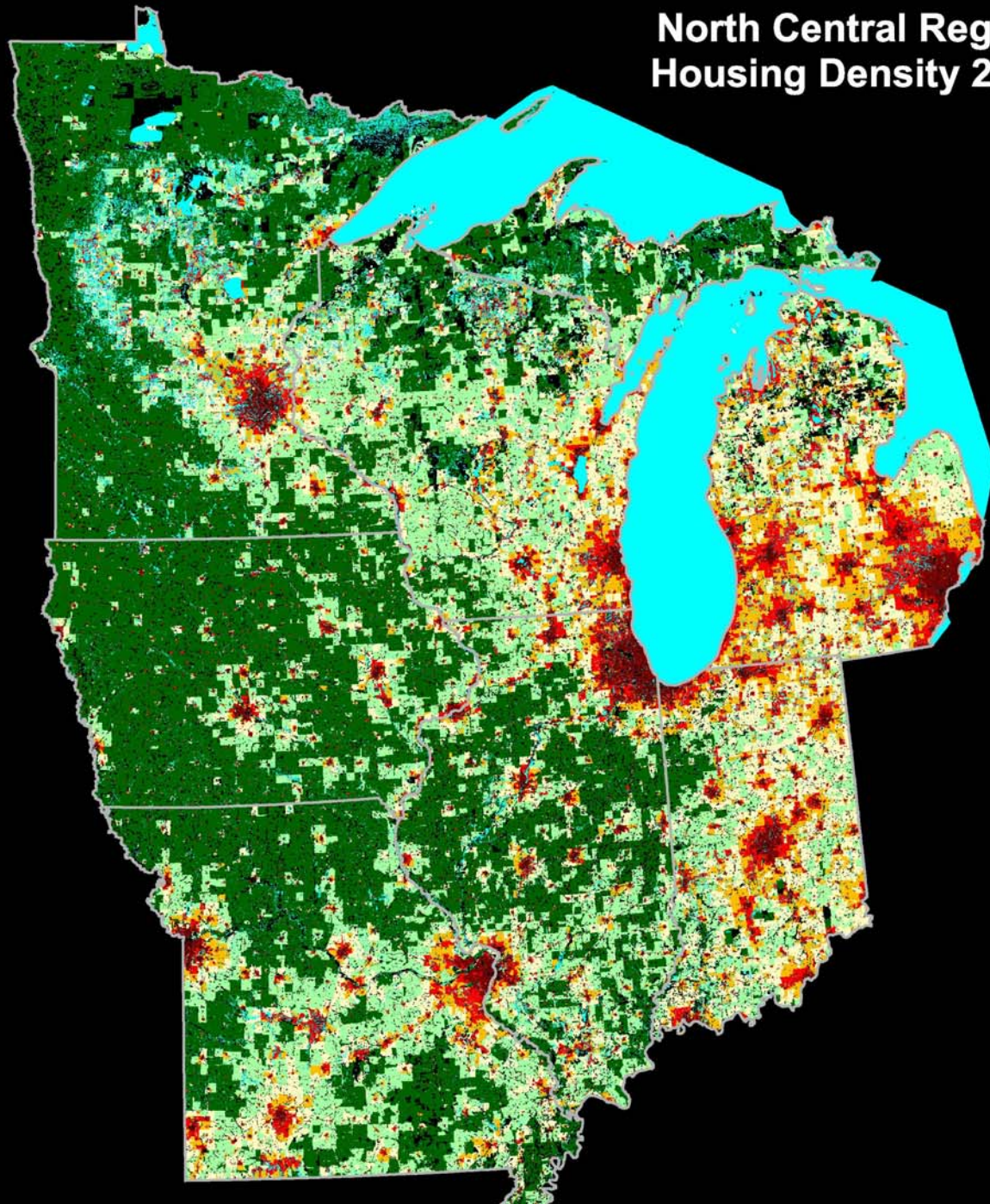
North Central Region Housing Density 1980

Housing Units
per Sq. Km.



North Central Region Housing Density 2000

Housing Units
per Sq. Km.



#5—Rural Land Development

**Amenity Development of Homes and Resorts and
its Impact on Public Recreation Opportunities**



Individual home and resort development occurring adjacent to public lands



**Wolf Creek
Golf Course
Mesquite, NV**

#6--Tourism Demand and Impacts

- **Markets and their trends**
- **Economic development impacts**
- **Specialty tourism, e.g., eco-tourism**
- **Tourism and public lands**
- **National and global interrelationships**

Economic Impact of Protected Natural Lands

- \$233.6 bn per annum of global tourism economic impact due to protected natural lands
- In Class Ib of the IUCN there are listed 642,486 km² of protected land classified as wilderness, 3.16% of all IUCN protected lands
- One could conclude that 3.16% of total economic impact of protected lands, or \$7.4 bn per annum, is attributable to wilderness

(Phil. Trans. R. Soc. B (2005) 360, 443–455, doi:10.1098/rstb.2004.1592, Published online 28 February 2005)



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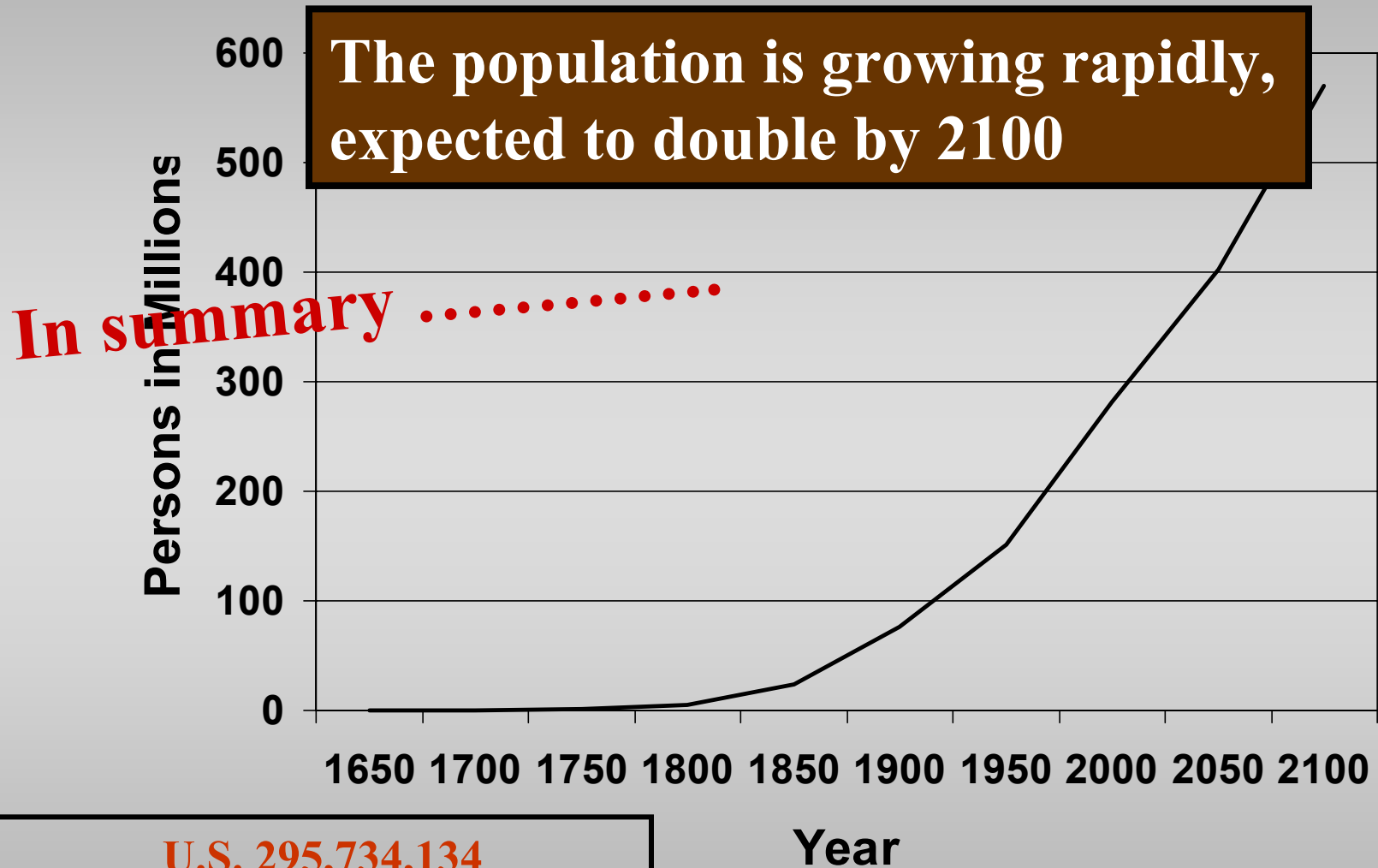
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Historical and Projected Population in the U.S.



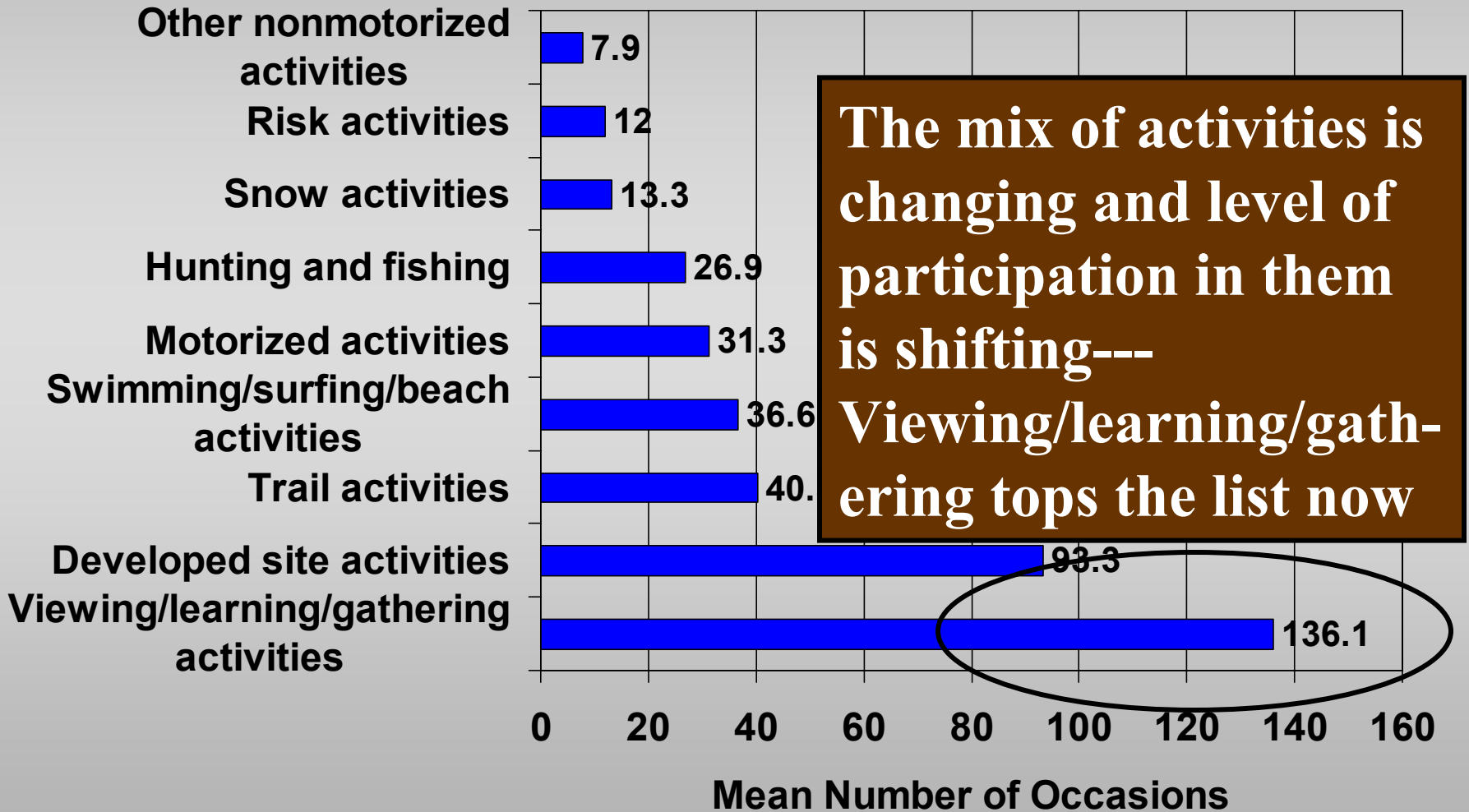
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Ten most popular activities in 2000-2001 and popularity ranking in 1994-1995.

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The more popular activities of the 90s remain popular in the 2000s, but there is a shifting of order

Mean number of occasions of participation by general type of outdoor activity, 2001



- Accommodating future growth in recreation demands **will likely fall heavily on public properties** and providers
- For federal properties, restoration and management of ecosystems and recreation are high priorities, but **funding is not coming** with those priorities
- State lands, especially state parks, are **reaching maturity**, except for high-end development
- Private landowners are continuing to **close more land**

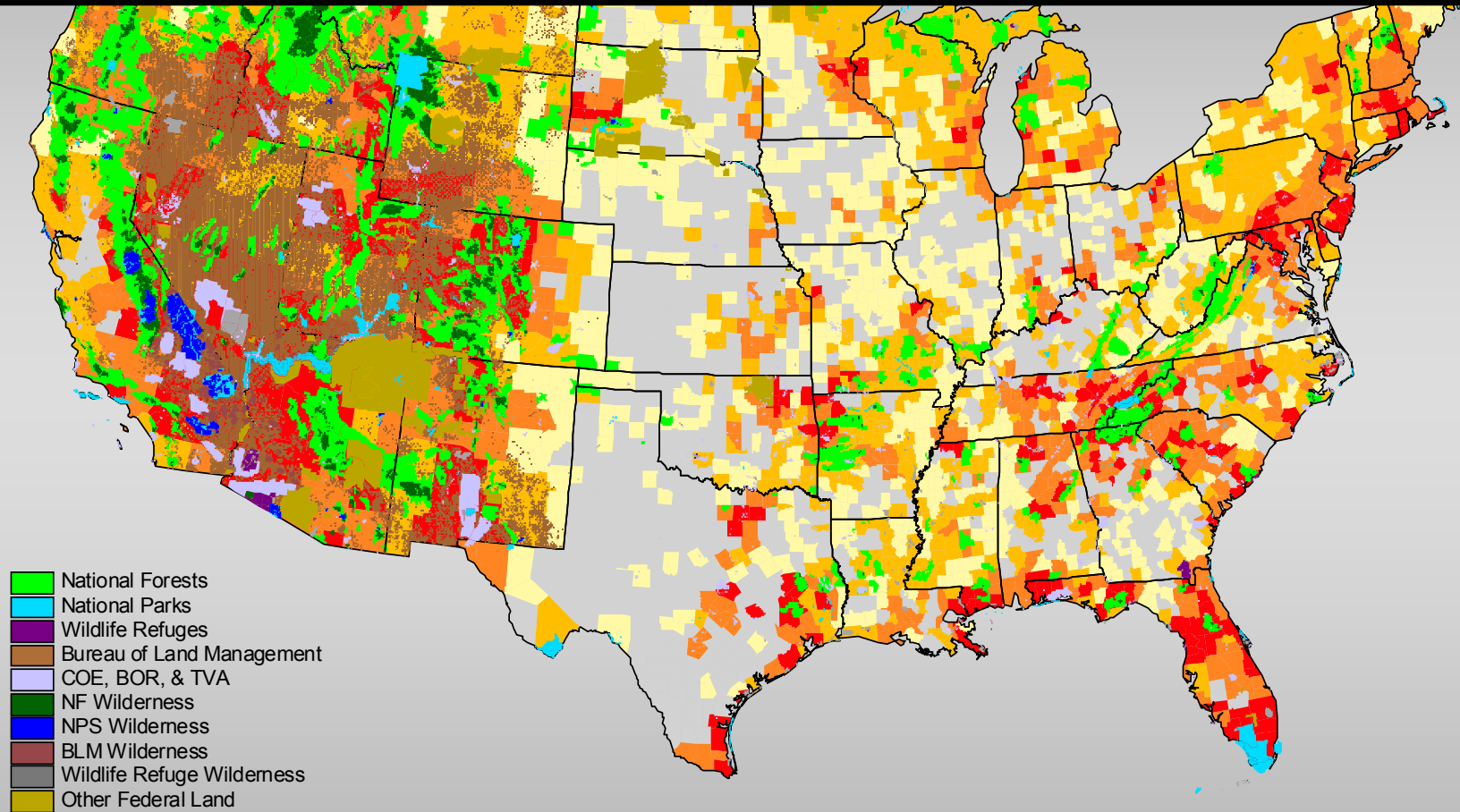
Landowner Intentions

	<u>National</u>	<u>South</u>
open more	5%	4%
same	88%	91%
less	7%	5%

Conflicts Among Different Recreation Users Are Likely to Grow

- Increasing demands for climbing, off-road vehicle use, hiking, horseback riding, motorized land use, wildlife viewing, tourism services, etc., etc., are likely to create **more competition and conflicts** for public properties, and for private owners.
- Broad spectrum of **activities likely to be in conflict** as demands grow for water access, trails, backcountry, developed sites, and roads.
- There is a tendency for one group (typically traditional and non-mechanized) to **perceive much more conflict** than others (non-traditional and mechanized).

Public lands will be a focus of opportunity and of controversy in coming years and decades. Here you see projected recreation demand hotspots, 2025



2020 Ambient Public Land x Recreation Interactions

- Negligible
- Light
- Moderate
- Moderately heavy
- Heavy

As population grows, it spreads across the landscape and ever nearer public lands

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