



Why Now?

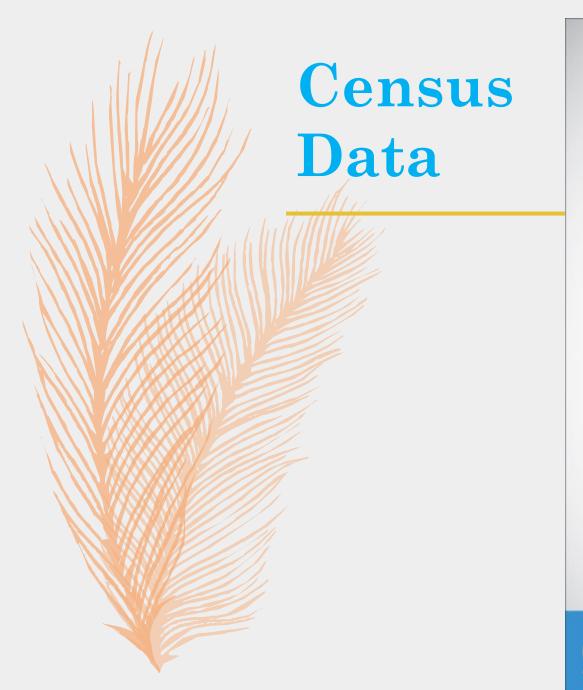
Executive Order 12898

- "Environmental Justice Mandate"
- Equity can be considered 'fair' and 'just'
- Procedural Justice the fairness of processes by which decisions are made
- Distributive Justice fairness in the distribution of rights or resources

Equity is paramount to contributions toward current and future sustainability *Winter et al., 2019a*.

Current inequities

- Uneven distribution of environmental quality, eg. safe, quality greenspaces (deVries et al., 2003; Jesdale et al., 2013; Rigolon et al., 2018; South et al., 2018)
- Climate change
- Covid 19

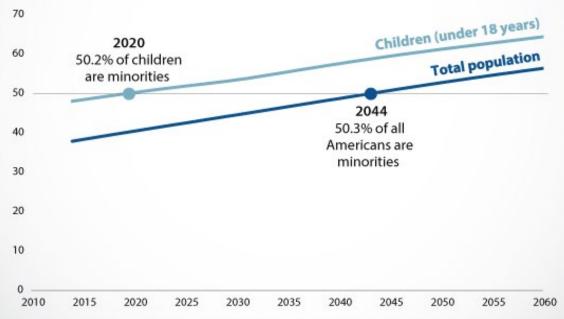




Projecting Majority-Minority

Non-Hispanic Whites May No Longer Comprise Over 50 Percent of the U.S. Population by 2044

Percent Minority by Age Group: 2014 to 2060



Note: Minority is defined in this figure as any group other than non-Hispanic white.



U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU CENSUS.gov Source: 7014 National Projections

Changing Demography

"...to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and **future generations**."

Population by Race and Hispanic Origin: 2014 and 2060

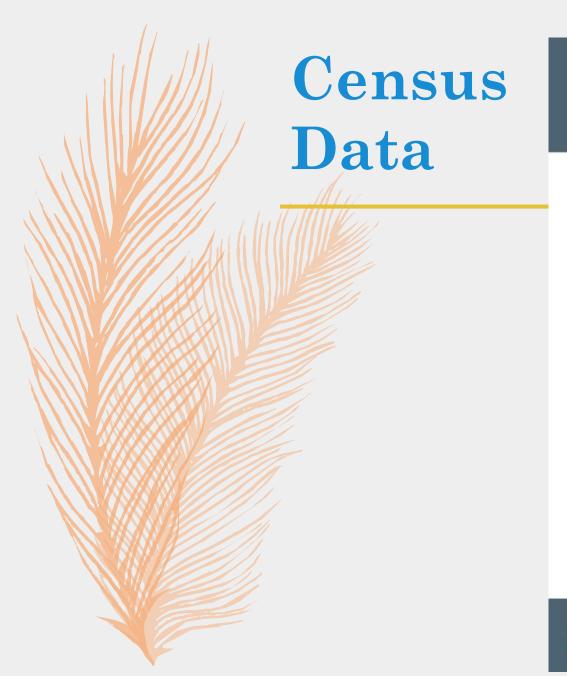
(Population in thousands)

Dana and Historia adeial	2014		2060		Change, 2014 to 2060	
Race and Hispanic origin ¹	Number	Percent	Number	Percent	Number	Percent
Total population	318,748	100.0	416,795	100.0	98,047	30.8
One Race	310,753	97.5	390,772	93.8	80,020	25.8
White	246,940	77.5	285,314	68.5	38,374	15.5
Non-Hispanic White	198,103	62.2	181,930	43.6	-16,174	-8.2
Black or African American	42,039	13.2	59,693	14.3	17,654	42.0
American Indian and Alaska Native	3,957	1.2	5,607	1.3	1,650	41.7
Asian	17,083	5.4	38,965	9.3	21,882	128.1
Native Hawaiian and Other Pacific Islander	734	0.2	1,194	0.3	460	62.6
Two or More Races	7,995	2.5	26,022	6.2	18,027	225.5
Race Alone or in Combination ²		40.5%		61.3%		
White	254,009	79.7	309,567	74.3	55,558	21.9
Black or African American	45,562	14.3	74,530	17.9	28,968	63.6
American Indian and Alaska Native	6,528	2.0	10,169	2.4	3,640	55.8
Asian	19,983	6.3	48,575	11.7	28,592	143.1
Native Hawaiian and Other Pacific Islander	1,458	0.5	2,929	0.7	1,470	100.8
Hispanic or Latino Origin						
Hispanic	55,410	17.4	119,044	28.6	63,635	114.8
Not Hispanic	263,338	82.6	297,750	71.4	34,412	13.1

¹ Hispanic origin is considered an ethnicity, not a race. Hispanics may be of any race. Responses of "Some Other Race" from the 2010 Census are modified. For more information, see https://www.census.gov/popest/data/historical/files/MRSF-01-US1.pdf.

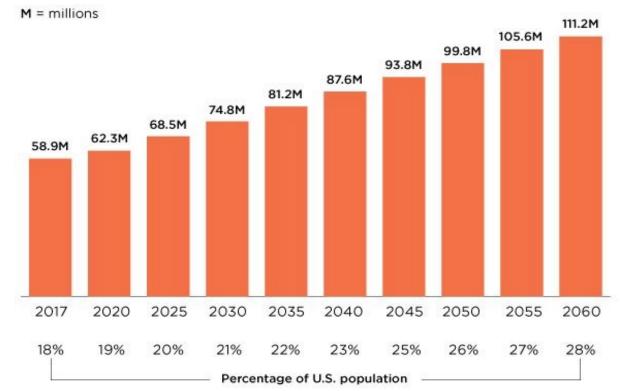
Source: U.S. Census Bureau, 2014 National Projections.

² "In combination" means in combination with one or more other races. The sum of the five race groups adds to more than the total population, and 100 percent, because individuals may report more than one race.



Hispanic Population to Reach 111 Million by 2060

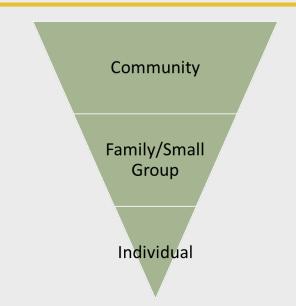
Projected Hispanic Population 2020 to 2060





Myriad Benefits of Nature Exposure & Outdoor Recreation

- Affect
 - Awe, happiness, joy, contentment
- Cognition
 - Improved attention, concentration & memory
- Socioemotional well-being
 - Increase in self-esteem, local / indigenous identity
 - Connection with nature
- Physical improvements
 - Immune system, shifting sedentary lifestyles
 - Some offset to health inequities
- Path to learn about the Forest Service



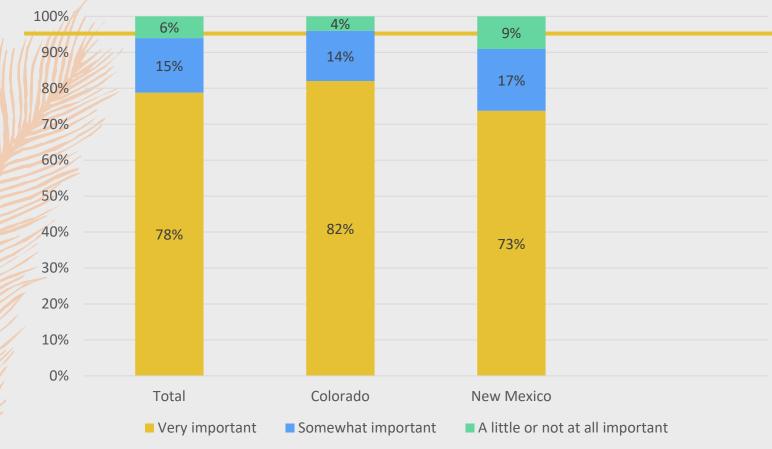
Ballew & Omoto, 2018; Bratman et al., 2012; Ewert & Chang, 2018; Frumkin et al., 2017; Hartig et al., 2014; Karjalainan et al., 2010; Kondo et al., 2015; Mitchell & Popham, 2008; South et al., 2018; Winter et al., 2020; Wolsko et al., 2019

These Important Benefits are not Distributed Equally

8%	8%	8%	110/						
		3 70	11%	7 %	11%	11%	10%	8%	9%
4%	6%	5%	6%	6%	7%	7%	7%	7%	7%
77%	75%	78%	71%	76%	71%	68%	70%	71%	70%
7%	7%	7%	9%	8%	8%	10%	10%	12%	6 12%
	77%	77% 75%	77% 75% 78%	77% 75% 78% 71%	77% 75% 78% 71% 76%	77% 75% 78% 71% 76% 71%	77% 75% 78% 71% 76% 71% 68%	77% 75% 78% 71% 76% 71% 68% 70%	77% 75% 78% 71% 76% 71% 68% 70% 71%

Importance of Public Land for Family Recreation

How important is it for government to preserve and protect our community's public lands and open spaces for family recreation and the overall well-being of the environment?



Ethno-racial Diversity in U.S. vs. Representation in NF Visits

	2010 US Census	NVUM - National Forest Visits
White	62.6%	94.6%
Black / African American	13.2%	1.2%
Asian	5.3%	2.6%
Hawaiian / Pacific Islander	0.2%	1.4%
American Indian / Alaska Native	1.2%	2.4%
Hispanic	17.1%	5.7%

Flores, D.; Falco, G.; Roberts, N.S.; Valenzuela, F.P., III. Recreation equity: Is the Forest Service serving its diverse publics? *J. For.* **2018**, *116*, 266–272.

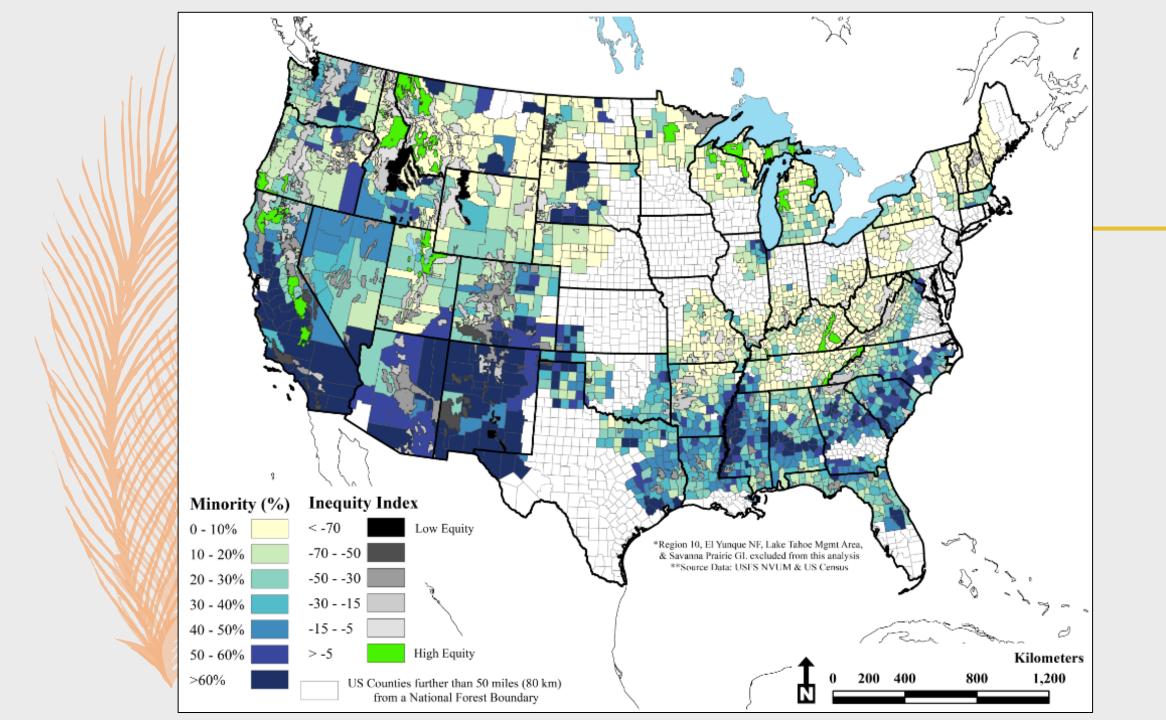
Example: Tonto National Forest

County	% NFV Minority	% County Minority	Difference
Apache	24.9	82.5	-57.6
Navajo	24.9	61.5	-36.6
Coconino	24.9	51.8	-26.9
Yavapai	24.9	24.3	+0.6
Gila	24.9	41.1	-16.2
Pinal	24.9	56.1	-31.2
Graham	24.9	58.3	-33.4
Maricopa	24.9	56.6	-31.7
Pima	24.9	60.2	-35.3

Inequity Index Value

-29.8







	Local Minority Population (%)	Visitor Population Minority (%)	Inequity Index
R1 Northern Region	12.1	5.4	-7.0
R2 Rocky Mt. Region	40.1	7.1	-32.9
R3 Southwestern	60.6	18.8	-41.8
R4 Intermountain West	41.5	9.9	-31.6
R5 Pacific Southwest	49.7	21.5	-28.2
R6 Pacific Northwest	28.8	9.1	-19.7
R8 Southern	34.3	11.9	-22.4
R9 Eastern	20.2	8.2	-12.0
NFS	35.5	11.7	-23.8

Had Ever Visited a National Forest

Gender	White/ Caucasian	Hispanic/ Latino	Asian/Pac Islander	Black/Afr American	Amer Ind/ Alaska Native
	Pct a	Pct	Pct	Pct	Pct
Female	94.1	54.5	74.2	63.6	78.9
Male	96.4	71.9	73.3	56.2	100.0

Winter PL, Crano WD, Basañez T, Lamb CS. 2020b. Equity in access to outdoor recreation—Informing a sustainable future. Sustainability. 12(1): 124. doi.org/10.3390/su12010124

Last Time Visited a National Forest

Last Time Visited	White/ Caucasian	Hispanic/ Latino	Asian/Pac Islander	Black/Afr American	Amer Ind/ Alaska Native
	Pct, n	Pct, n	Pct, n	Pct, n	Pct, n
Last week	10.1, 105	5.7, 15	7.1, 4	5.6, 3	17.5, 7
Last month	14.3, 149	7.2, 19	8.9, 5	9.3, 5	17.5, 7
Last six months	26.2, 272	24.9, 66	30.4, 17	7.4, 4	27.5, 11
Last year	13.0, 135	18.1, 48	21.4, 12	11.1, 6	10.0, 4
More than one year	36.4, 378	44.2, 117	32.1, 18	66.7, 36	27.5, 11



Barriers to Outdoor Recreation

Never Visited (309 participants- 258 specific reasons provided)

- a lack of time (including work, school, or family responsibilities—106 mentions)
- a lack of money (35 mentions)
- // lack of interest (27 mentions)
- distance to the forest (23 mentions)
- lack of information (18 mentions) or
- transportation (17 mentions)

Why not visit more often (1754 responses)

- lack of time (360 mentions)
- work or school (322 mentions)
- lack of money (264 mentions)
- too far/distance to national forest (151 mentions)
- health or physical limitations (124 mentions)
- age (93 mentions)
- family responsibilities (61 mentions), and
- transportation (49 mentions)

Ranking of Four Major Constraints by Ethnoracial Group

Constraint	White/ Caucasian	Hispanic/ Latino	Asian/Pac Islander	Black/Afr American	Amer Ind/ Alaska Native
	Rank	Rank	Rank	Rank	Rank
Time	1	1	1	1	1
Age/health	2	4	4	3	3
Money	3	2	3	2	2
Travel	4	3	2	3	4





Sample Strategies – An Evidence Based Approach

Overarching goals

Invite, Include & Involve

Chavez DJ. 2000. Invite, include, and involve: racial groups, ethnic groups, and leisure. Diversity and the Recreation Profession: Organizational Perspectives. State College, PA: Venture Publishing, p. 179-191

Invite!





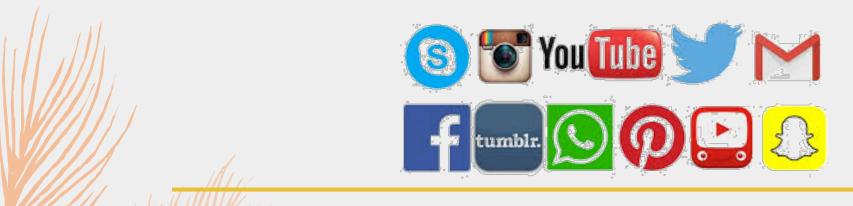


Information Sources Most DESCUBRE Trusted

BOSQUE

	Caucasian	Latino	Asian	Af Amer	Amer Ind
Internet	58	54	56	54	49
Friends	14	11	25	15	19
Visitor centers or park staff	11	6	10	9	12
Relatives	7	6	3	8	12

Winter PL, Crano WD, Basañez T, Lamb CS. 2020b. Equity in access to outdoor recreation—Informing a sustainable future. Sustainability. 12(1): 124. doi.org/10.3390/su12010124















From Rugged Individualism to Communal



Include!







Creating New Meanings



INNER City Anglers



#DIVERSIFY OUTDOORS –A
COALITION OF SOCIAL MEDIA
INFLUENCERS



Where Black People & Nature Meet

Awakening & Strengthening the Connection of Urban Youth to the Land Final Report Submitted to USFS June 2017 CAL POLY

Involve!

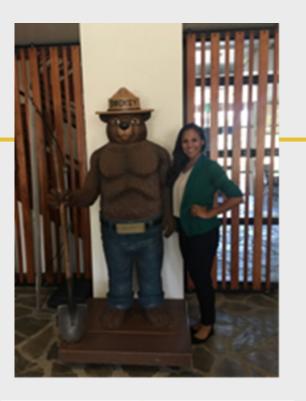
Zoom in 29 Outside your door!

Young Producers Bridge the
 Divide between Urban Youth and
 Public Lands

https://www.youtube.com/playlist?li st=PLQMetRBbkaeLoRw5USK9adTtN CX0pOevn

BAYCAT; San Francisco State
University; US Forest Service, Pacific
Southwest Research Station











Building a Sense of Belonging





Additional Resources

- Roberts NS, Chavez DJ, Lara BM, Sheffield EA. 2009. Serving culturally diverse visitors to forests in California: a resource guide. Gen. Tech. Rep. PSW-GTR-222. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 76 p
 - Sanchez JJ, Cerveny LK, Blahna DJ, Valenzuela F, Schlafmann M. 2020. Chapter 3: Recreation opportunities and human connections on public lands: Constraints that limit recreation participation. In: Selin, Cerveny, Blahna, Miller, eds. 2020. Igniting research for outdoor recreation: linking science, policy, and action. Gen. Tech. Rep. PNW-GTR-987. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 41-50.



Thank you!

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