

Stakeholder Endorsements for the Colorado Wilderness Act of 2019:

1. American Hiking Society
2. Ancient Forest Rescue
3. Animas Riverkeeper
4. Audubon Rockies
5. Backcountry Skiers Alliance
6. Beaver Lake Retreat Center
7. Biodiversity Legal Foundation
8. Blue River Anglers
9. Center for Environmental Citizenship
10. Center for Independence
11. Central Colorado Wilderness Coalition
12. Clean Water Advocacy Center
13. Colorado Mountain Club
14. Colorado Audubon Council
15. Colorado Native Plant Society
16. Colorado Wild
17. Colorado Wildlife Federation
18. Colorado Wolf and Wildlife Center
19. Community Alliance of the Yampa Valley
20. Conservation Colorado
21. Colorado Public Interest Research Group
22. CU Environmental Center
23. CU Environmental Studies Club
24. CU Hiking Club
25. CU Wilderness Study Group
26. Earthjustice Legal Defense Fund
27. Earthlaw
28. EnACT
29. Environment Colorado
30. Environmental Center of Fort Lewis College
31. Friends of The Yampa
32. Friends of Westwater Inc.
33. Frying Pan Anglers
34. Grand Valley Citizen's Alliance
35. Great Old Broads for Wilderness
36. High Country Citizen's Alliance
37. Mesa County Green Party
38. Mesa County Wilderness Coalition
39. National Parks Conservation Association
40. National Wildlife Federation
41. Natural Resources Defense Council
42. Nordic Council
43. Quiet Use Coalition
44. Ridgway-Ouray Community Council
45. Roaring Fork Anglers

46. Rocky Mountain Canoe Club
47. Rocky Mountain Field Institute
48. Rocky Mountain Peace and Justice Center
49. Rocky Mountain Recreation Initiative
50. Rocky Mountain Wild
51. San Juan Citizen's Alliance
52. San Luis Valley Ecosystem Council
53. Sopris Greens
54. Sheep Mountain Alliance
55. Sierra Club Rocky Mountain Chapter
56. Southern Rockies Ecosystem Project
57. Southern Utah Wilderness Alliance
58. Thorne Ecological Institute
59. Uncompahgre Unitarian Universalist Society
60. Uncompahgre Valley Association
61. Western Colorado Alliance
62. Western Environmental Law Center
63. Western Resource Advocates
64. Western Slope Environmental Resource Council
65. Wild Connections
66. Wilderness Education Institute
67. Wilderness Land Trust
68. Wilderness Workshop
69. Wildlands Restoration Volunteers
70. Windstar Foundation
71. Winter Wildlands Alliance
72. Young Greens of Mesa State College

Business Endorsements for the Colorado Wilderness Act of 2019

Business	Contact Person	City	Zip code	Congressional District
Friends Fields Inc	Margy Dalpes	Arvada	80002	CO-07
Hart's Skating and Dancewear	Karin Dukehart	Arvada	80002	CO-07
House of Seasons	Carol Boyd	Arvada	80002	CO-07
Mr. Mike's Repair	Michael Cady	Arvada	80002	CO-07
Hill's Aspen Gallery of Photography	Joe Wright	Aspen	81611	CO-03
Hotel Lenado	Daniel Delano	Aspen	81611	CO-03
UTE Mountaineer	Bob Wade	Aspen	81611	CO-03
Bristlecone Mountain Sports	Susan& Don Edmonds	Basalt	81621	CO-03
Taylor Creek Fly Shops	Tim Heng	Basalt	81621	CO-03
Ames Burgess Ranch LLC	Martha A. Burgess	Bedrock	81411	CO-03
Boulder Mountain Repair	Karen Gordan	Boulder	80305	CO-02
Little Mountain	Dan Groenwald	Boulder	80302	CO-02
Montgomery Partnership Architecture	Steve Montgomery	Boulder	80304	CO-02
Mountain Sports	Daniel Howley	Boulder	80302	CO-02
Target Earth International	Nicole Holt	Boulder	80302	CO-02
The Cup Espresso Café	Wendy Ball	Boulder	80302	CO-02
Neptune Mountaineering	Gary Neptune	Boulder	80305	CO-02
Big City Blues	Andrea Gessner	Breckenridge	80424	CO-02
Loom and Weave Inc	Jeremy Feldman	Breckenridge	80424	CO-02
Mountain Angler	Jackson Streit	Breckenridge	80424	CO-02
Rasta Pasta	Noble Wolf Schlicht	Breckenridge	80424	CO-02
The Adventure Rafting Company	Becky	Breckenridge	80424	CO-02
Great Big Color Inc	Sean McLaughlin	Broomfield	80020	CO-02
MasterPrint	Meena Keuer	Broomfield	80020	CO-02
The Trailhead	Dick & Jan Scar	Buena Vista	81211	CO-05
Echo Canyon River Exp. Inc.	David Burch	Canon City	81212	CO-05
Mother Nature's Health Food Store	Marjorie F. Oldfield	Canon City	81212	CO-05
Alpine Angling and Adventure Travel	Jeff Dysart	Carbondale	81623	CO-03
Sopris Surfers	Dale Ahrens	Carbondale	81623	CO-03
Centennial Canoe Outfitters Inc.	Julia Gumpster& Marty Genereux	Centennial	80161	CO-06
Boulder Running Company	Cody Hill	Colorado Springs	80918	CO-05
Cripple Creek District Museum	Jan MacKell	Colorado Springs	80813	CO-05
Criterium Bicycles	Nic Ponsor	Colorado Springs	80919	CO-05
Gordon Anderson Photography	Gordon Anderson	Colorado Springs	80904	CO-05
Mountain Chalet	Dan Foster	Colorado Springs	80903	CO-05
Pikes Peak Mountain Bike	Sarah	Colorado Springs	80904	CO-05
The E-Quest Corporation	Howard Hallman Jr.	Colorado Springs	80943	CO-05
Canyon Sports LLC	Duane Daniels	Cortez	81321	CO-03
Jake's Rio Grande Outfitting Service	David Jake Powell	Creede	81630	CO-03
Bill Myers, P.C.	Bill Myers	Denver	80223	CO-01
C.W. Action	Carmi McLean	Denver	80203	CO-01
Colorado Outdoor Recreational Adventures	Drew Shaw	Denver	80231	CO-06
Confluence Kayaks LLC	Jonathan Kahn	Denver	80202	CO-01
Golden West Co. LLC	Errol Cerovski	Denver	80205	CO-01
Patagonia (Denver)	Dave Richardson	Denver	80202	CO-01
Arapahoe CafŽ/Pub	Michael & Star Betz	Dillon	80435	CO-02
Pug Ryan's (brewery)	Travis Holton	Dillon	80435	CO-02
Dolores River Brewery	Mark Youngguist	Dolores	81323	CO-03
A Shared Blanket	D. Frank	Durango	81301	CO-03
AAM's Mild to Wild Rafting	Alex Mickel	Durango	81301	CO-03
Animas Trading Co	Cathy Wakeman	Durango	81301	CO-03
Animon City Rock LLC	Anne Batt-Ostlund	Durango	81301	CO-03
Business	Contact Person	City	Zip code	Congressional District

Business Endorsements for the Colorado Wilderness Act of 2019

Business	Contact Person	City	Zip code	Congressional District
Aquarius Adventures	Valyda May	Durango	81301	CO-03
Backcountry Experience	Kirk Singer	Durango	81301	CO-03
Branson Reynolds Photography	Branson Reynolds	Durango	81301	CO-03
Carver Brewing Co	Barbara Wynne Seitz	Durango	81301	CO-03
Carver Brewing Company	Zachary Lawrence	Durango	81301	CO-03
Colorado Mtn. Expeditions	Pete Turner	Durango	81303	CO-03
Concrete Ski Shop		Durango	81301	CO-03
Couldberries	Cheryl Hobby	Durango	81301	CO-03
Dancing Willows Herbs Inc.	Debra Reuben	Durango	81301	CO-03
Durangers Inc.	Tom Knopick	Durango	81301	CO-03
Durango Kid	Barbara Haas	Durango	81301	CO-03
Durango Shirt Co.	Kristin Kuhn	Durango	81301	CO-03
Ecos Consulting	Chris Calwell	Durango	81301	CO-03
Flexible Flyers Rafting	Robin Fritch& Steven Saltsman	Durango	81301	CO-03
Gardenswartz Sporting Goods	Brian Hessling	Durango	81301	CO-03
Gunnar Conrad Photography	Gunnar Conrad	Durango	81301	CO-03
Hummingbirds Herbals	Melanie Rose	Durango	81301	CO-03
Main Avenue Marketplace	Andrea Brenell	Durango	81301	CO-03
Maria's Bookshop	Peter Schertz	Durango	81301	CO-03
Nature's Oasis	Jeff& Sherri Watson	Durango	81301	CO-03
Norton Painting Inc.	Dylan Norton	Durango	81301	CO-03
P. River Outfitters	Tom Kleema	Durango	81301	CO-03
Performance Video	Kent Ford	Durango	81301	CO-03
Pineneedle Mountaineering	Cindy Schroeder	Durango	81301	CO-03
POPOLI- Design for People	Christine Conner	Durango	81301	CO-03
Precious Earth	Kim Pardini	Durango	81301	CO-03
Reruns	Laura Fickard	Durango	81301	CO-03
Rhea Environmental Consulting	Barry Rhea	Durango	81301	CO-03
Ski Barn Inc.	Jurgen Umbhau	Durango	81301	CO-03
The Boarding Haus	John Agnew	Durango	81301	CO-03
The Light Store Inc	Crissy Schneider	Durango	81301	CO-03
Urban Homestead	Tracy Campbell	Durango	81301	CO-03
	Katie Walsh			
	Michele Lawrence			
Yoga Durango	Sherly McGourty	Durango	81301	CO-03
Mountain Misen LTD	Claudia Goodman	Englewood	80110	CO-01
In the Groove Inc.	Sherleen Westfield	Estes Park	80517	CO-02
The Snow Leopard	Matt Sampson	Evergreen	80439	CO-02
Rock Solid Adventures	George Watson	Florissant	80816	CO-05
DŽj^ Vu Coffeehouse	Nancy Brown	Fort Collins	80524	CO-02
Hearne's Fine Goods	Main Turner	Fort Collins	80524	CO-02
New Belgium Brewing Co.	Nina Thompson	Fort Collins	80524	CO-02
Poudre River Kayaks	Claire Carren	Fort Collins	80521	CO-02
Rocky Mountain Home Collection	Vicki Stroud	Fort Collins	80524	CO-02
Trails End Hardscapes Inc.	Jamie Black	Fort Collins	80524	CO-02
COPY COPY	Frank Lilly	Frisco	80443	CO-02
Pioneer Sports	Mark Wimberly	Frisco	80443	CO-02
Summit Canyon Mountaineering	Steve Davis	Glenwood Spgs.	81601	CO-03
Architecture Works	Joe Doyle	Golden	80403	CO-07
Mounainsmith	Kristine Dirla	Golden	80401	CO-07
The Bent Gate Inc.	Kristi Floyd	Golden	80401	CO-07
Timberline Llamas Inc.	Weston& Mary Mauz	Golden	80439	CO-02
Greeley Monument Works	Debbie Dacton& Michael McBride	Greeley	80631	CO-04

Business Endorsements for the Colorado Wilderness Act of 2019

Business	Contact Person	City	Zip code	Congressional District
Business	Contact Person	City	Zip code	Congressional District
Marbled Artworks by Marie Palowoda	Maria Palowoda	Greeley	80634	CO-04
Margies Java Joint& The Book Stop	Deanna Shepard	Greeley	80631	CO-04
Mellow Yellow	Jodie Callen	Greeley	80631	CO-04
Paws Animal Clinic	David Shoemaker	Greeley	80634	CO-04
All Sports Replay	Andrew Smith	Gunnison	81230	CO-03
Black Diamond Exp.& Tenderfoot Rafting	Greg Osgood	Gunnison	81230	CO-03
Mountain Mamas	Marianne Tarr	Gunnison	81230	CO-03
The Book Worm	Marcia Duncan	Gunnison	81230	CO-03
Cannibal Outdoors	Jack& Leslie Nichols	Lake City	81235	CO-03
Hall Realty, Mountaineer Inc.	Phil& Carolyn Virden	Lake City	81235	CO-03
Lake City Properties Inc.	William& Ruthanna Hall	Lake City	81235	CO-03
Rosemary Knight CPA	Rosemary Knight	Lake City	81235	CO-03
The Pueblo House	Christi Hall	Lake City	81235	CO-03
Zen Home Construction Inc.	Ken Bodine	Lake City	81235	CO-03
Donut Hut	Richard& Carol Wolfe	Littleton	80123	CO-06
Sisters' Espresso	Laurie Hurd	Littleton	80120	CO-06
Backcountry Escape LLC	Shonda Lehtola	Longmont	80501	CO-04
Grandpa's Pawn and Gun	Rod Brandenburg	Longmont	80501	CO-04
The Dickens House Bed& Breakfast	Kim Khake	Longmont	80501	CO-04
Red Canyon Art Co.	Judy McDonald/Mary Ward	Lyons	80540	CO-02
Deer Hill Expeditions	Douglas& Beverly Caplin	Mancos	81328	CO-03
Blue Planet Earthscapes	Becky Elder	Manitou Spgs	80829	CO-05
The Cliff House @Pikes Peak	Craig A. Hartman	Manitou Spgs	80829	CO-05
Black Cat Books	Natalie Johnson	Manitou Springs	80829	CO-05
Mountain Wind and Sun	Laura Bell	Manitou Springs	80829	CO-05
Natural Gems by the Corner Goldsmith	Stephen A. Smith	Manitou Springs	80829	CO-05
The Hemp Store	John	Manitou Springs	80829	CO-05
Backstreet Bagel & Deli	Pete Freer	Montrose	81401	CO-03
Devinny Jewelers	David Devinny	Montrose	81401	CO-03
Cimarron Creek	Bob Burk	Montrose	81401	CO-03
Montrose Chiropractic	John T. Unger	Montrose	81401	CO-03
Ross Reels	David S. Heller	Montrose	81401	CO-03
Scott Fly Rods	Junimz Britschi	Montrose	81401	CO-03
The Soul Garden	Jim Riddell	Montrose	81403	CO-03
Valley Books & Coffee	Charlie Peterson	Montrose	81401	CO-03
Streamside Bed& Breakfast	Dennis&Kathleen Claveau	Nathrop	81236	CO-05
Outwest Guides	Gary Hubbell	New Castle	81647	CO-03
Reed Designs LLC	Lorna Reed	Palisade	81526	CO-03
Vistas and Vineyards B&B	Donna	Palisade	81526	CO-03
Earth Write	Iris Meachum	Parachute	81635	CO-03
The John Deaux Art Gallery	Riadeaux	Pueblo	81003	CO-03
Redstone Inn	Deborah Strom	Redstone	81623	CO-03
Adobe Inn	Joyce Bucknam	Ridgway	81432	CO-03
Cimarron Books& Coffeehouse	Priscilla Peters	Ridgway	81432	CO-03
CO Kids Clothing Co.	Ellen Hunter	Ridgway	81432	CO-03
Ridgway office Supply& Services	Gale Ingram	Ridgway	81432	CO-03
Firehouse Sculpture & Gallery	Joni McCullough	Ridgway	81432	CO-03
Ridgway Outdoor Experience	Albert Adams	Ridgway	81432	CO-03
Ridgway Rentals	Patsy Young	Ridgway	81432	CO-03
San Juan Stone Company LLC	Cindy Feirn	Ridgway	81432	CO-03
Unicas Southwest	Deborah Lombardo	Ridgway	81432	CO-03
White House Salon	Judi S.	Ridgway	81432	CO-03

Business Endorsements for the Colorado Wilderness Act of 2019

Business	Contact Person	City	Zip code	Congressional District
Willowcreek Floral	Paula Brown	Ridgway	81432	CO-03
Business	Contact Person	City	Zip code	Congressional District
Light Hawk	Michelle G.	Rifle	81650	CO-03
Lifestream Water Systems	Mike Kunkel	Salida	81201	CO-05
Silver Mountain Harvest LTD	Maryelleu& Brandon Hubley	Silverton	81433	CO-03
Simpler Way Book Co.	John Marshall	Silverton	81433	CO-03
Renegade LLC	Betsy Fields	Silverton	81433	CO-03
Alpine Art & Glasswork	Vickie Rosenzweig	Steamboat Springs	80487	CO-03
Backcountry Provisions	David Pepin	Steamboat Springs	80487	CO-03
Backdoor Sports Ltd.	Peter Van de Carr	Steamboat Springs	80487	CO-03
Bamboo Market	Anne Halloran	Steamboat Springs	80487	CO-03
Epilogue Book Company	Erica Focelle	Steamboat Springs	80487	CO-03
Little Moon Essentials	Laura Lamun	Steamboat Springs	80487	CO-03
Mad Dog Sports	John Seymour	Steamboat Springs	80487	CO-03
Mail Boxes, Etc.	Al Callahan	Steamboat Springs	80487	CO-03
Matt & Bryan's Outdoor Shop	Matt Taff, Bryan Ayer	Steamboat Springs	80487	CO-03
Mountain High Technology	Marty Rosenzweig	Steamboat Springs	80487	CO-03
One Stop Ski Shop Ltd	John M Kole	Steamboat Springs	80487	CO-03
Orange Peel Bicycle Service US	Brock S. Webster	Steamboat Springs	80487	CO-03
Spring Sips	Stephanie Reineke	Steamboat Springs	80487	CO-03
Straightline Outdoor Sports	Brett Lee	Steamboat Springs	80487	CO-03
Use It Again Sports	Fred Garrison	Steamboat Springs	80487	CO-03
Vino	Michael Kirlum & Lisa Lesyshen	Steamboat Springs	80487	CO-03
Ivar Eidsmo Builder Inc.	Ivar Eidsmo	Telluride	81435	CO-03
Telluride Outside	John Duncan	Telluride	81435	CO-03
Tomboy Soup	Jessica Newens Co.	Telluride	81435	CO-03
Vectra Bank Colorado	Timothy J. Cannon	Telluride	81435	CO-03
Arkansas Valley Adventure	Duke Brad Ford	Buena Vista	81228	CO-05



P.O. Box 1442
CARBONDALE, CO 81623

TEL (970) 963-3977
FAX (970) 963-8447

www.wildernessworkshop.org
info@wildernessworkshop.org

June 14, 2019

The Honorable Diana DeGette
U.S. House of Representatives
2111 Rayburn House Office Building
Washington D.C. 20515

Dear Congresswoman DeGette,

BOARD OF DIRECTORS

KARIN TEAGUE
President

ALLYN HARVEY
Vice President

CHARLES HOPTON
Co-Treasurer

PETER LOORAM
Co-Treasurer

LINDSAY GURLEY
Secretary

DENALI BARRON

MARY DOMINICK
CICI FOX

MICHAEL MCVOY
ARON RALSTON

JILL SOFFER

MICHAEL STRANAHAN

PETER VAN DOMELEN

ANDY WIESSNER

TED ZUKOSKI

FOUNDERS

JOY CAUDILL*

DOTTIE FOX*

CONNIE HARVEY

EXECUTIVE DIRECTOR

WILL ROUSH

*Deceased

I am writing in support of wilderness protections for the Bull Gulch, Castle Peak and Pispah Mountain areas included in the Colorado Wilderness Act of 2019. These areas comprise spectacular public lands to the north of the Colorado River. They contain stunning scenery and geologic formations, amazing opportunities for primitive and unconfined recreation and low elevation ecosystem types that are under represented in the National Wilderness Preservation System in Colorado.

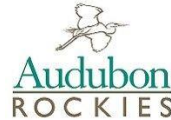
The Bull Gulch and Castle Peak areas are largely made up of Wilderness Study Areas recommended to Congress by the Bureau of Land Management for wilderness designation. All three of the areas provide critical low and mid-elevation habitat, opportunities for solitude, and archeological resources. Together they would form a substantial protected area surrounding by other public lands and significantly benefit wildlife in the area. Wildlife populations have declined precipitously in the past decades in the Eagle Valley - as an example Elk numbers have decreased 42% in the past two decades.

Protecting these areas will both ensure important wildlife habitat remains free of development and viable into the future as well as create a unique recreational resource.

Thank you for your work to protect Colorado's spectacular public lands.

Sincerely,
Will Roush

Executive Director



**Central Colorado
Wilderness Coalition**



July 9, 2019

The Honorable Diana DeGette
U.S. House of Representatives
2111 Rayburn House Office Building
Washington D.C. 20515

Dear Congresswoman DeGette:

We, the undersigned organizations, write to express our resounding support for the Colorado Wilderness Act of 2019 (H.R. 2546). Thank you for introducing this important legislation protecting public lands that are a critical part of our livelihoods, our health, our identity and our heritage here in Colorado.

As you know, The Colorado Wilderness Act is based on a proposal created by concerned citizen groups, many of which are represented here, who wanted to protect these public lands for future generations. We want to reiterate that all thirty units have agency-identified road-less or wilderness characteristics. In addition, twenty-one of these thirty-three areas are already managed as Wilderness Study Areas and have been managed as such for nearly forty years. We agree that these areas deserve to be officially designated as Wilderness—the strongest level of land protection in the country. The need for this protection has only grown as more people have moved or traveled to Colorado to enjoy its natural splendor.

We appreciate that you have met with countless stakeholder groups like ours, as well as off-highway vehicle (OHV) groups, ranchers, mountain bikers, rock climbers, land management agencies, land owners, and other local elected officials. We know that these meetings have been integral to refining the Colorado Wilderness Act. We believe that the current proposal balances

the interests of stakeholders while providing protections for these pristine places for future generations.

Throughout the years, our commitment as Coloradans to protecting our public lands has only grown. The thirty-three areas in the bill include stunning red cliffs, winding river-ways, and steep, rocky ridges. From Carbondale to Colorado Springs, and Denver to Durango – our state has a remarkable outdoor heritage filled with treasured landscapes and an abundance of natural resources. The state’s magnificent public lands provide a high quality of life, economic opportunity, and a home to many species of flora and fauna. Now more than ever, we need a comprehensive vision for protecting Colorado’s last remaining wild places. The 2019 bill reflects the efforts of grassroots activists, citizens, landowners, and recreationalists across the state.

Our organizations applaud your leadership on this critical bill, which has been carefully crafted to balance stakeholder interests with the need to protect our most awe-inspiring, untouched lands. We stand ready to partner with you and other stakeholders to see the Colorado Wilderness Act of 2019 become law.

Sincerely,

Conservatives for Responsible Stewardship
Wild Connections
Sierra Club Rocky Mountain Chapter
Conservation Colorado
Western Colorado Alliance
Central Colorado Wilderness Coalition
San Juan Citizens Alliance
Wildlands Restoration Volunteers
Great Old Broads for Wilderness
Friends of Browns Canyon
Audubon Rockies



Colorado has something for everyone including wilderness areas which are administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment, and now more than ever we need a comprehensive vision for protecting Colorado's last remaining wild places. That's why Osprey Packs Inc. strongly supports the Colorado Wilderness Act of 2019 (H.R. 2546). sponsored by Congresswoman Diana DeGette. The bill would designate 31 areas in Colorado as Wilderness, the strongest level of land protection in the country, and 2 areas as Potential Wilderness, totaling over 740,000 acres.

Osprey Packs was founded in 1974, and has been operating in Colorado since 1990, designing and manufacturing the most technically sophisticated gear carrying solutions on the market. A leader in technical packs for outdoor, cycling, travel and urban adventures, Osprey's dedication to create innovative, high performance gear reflects our brand's love of adventure and devotion to the outdoors. We've chosen to call Colorado home for simple reasons – a slower pace of life, a robust western agricultural heritage, and a wealth of stunning landscapes nearby, from desert badlands to spectacular alpine mountain ranges in which to recreate and test the products we passionately create.

Many of our customers – as well as our own Team Members - regularly visit these outdoor treasures, and according to the 2018 Conservation in the West Poll, two-thirds of Coloradans see rollbacks of laws that protect our land, water, and wildlife as a serious problem for the state. These last wild places define Colorado in many ways, with a rich mining and ranching history, and now supporting a thriving modern-day recreation and tourist economy. They fish in cold mountain streams, backpack into high lake basins, and hunt on the forested lower slopes. Skiers, climbers and mountain bikers enjoy our magnificent state with stunning mountain scenery as the backdrop where a wide variety of outdoor recreation opportunities abound.

Osprey is one of many businesses across Colorado that support this proposal. And for good reason: outdoor recreation generates \$28 billion in annual consumer spending in Colorado while creating 229,000 direct jobs, \$9.7 billion in wages and salaries and collecting \$2 billion in state and local tax revenue. Many of these consumers regularly visit and recreate in protected public lands. Having our headquarters in Colorado is not only good for our Team Member's lifestyles, it's good for our bottom line, and the region's economy.

The Colorado Wilderness Act has an important hearing on 7/10 and may be considered for further action then. All of Colorado's elected officials should support the bill and work with Congresswoman DeGette to see it enacted. Our business is an important part of the outdoor recreation economy of Colorado and Osprey urges our congressional representatives to get this important legislation over the finish line.

Layne Rigney, CEO, Osprey Packs Inc.

The Economic Contributions of Outdoor Recreation in Colorado: A regional and county-level analysis



Colorado Parks & Wildlife
Denver, CO

February 24, 2014



SOUTHWICK
A S S O C I A T E S

FISH AND WILDLIFE ECONOMICS AND STATISTICS

PO Box 6435
Fernandina Beach, FL 32035
Tel (904) 277-9765

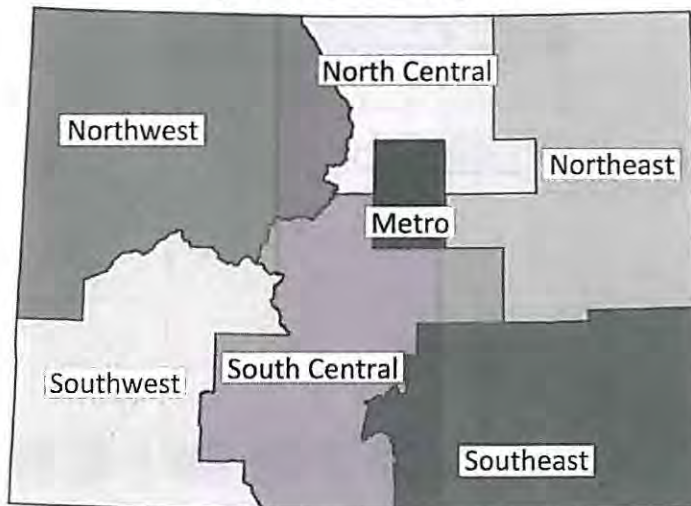
Executive Summary

This study, conducted by Southwick Associates for Colorado Parks and Wildlife, quantifies the economic contribution of outdoor recreation in Colorado and 7 regions within the state¹. Outdoor recreation constitutes a substantial part of the Colorado economy. The total economic output associated with outdoor recreation amounts to \$34.5 billion dollars, contributing \$19.9 billion dollars to the Gross Domestic Product of the state. This economic activity supports over 313,000 jobs in the state, which represents 13.2% of the entire labor force in Colorado and produces \$12.4 billion dollars in salaries and wages. In addition, this output contributes \$4.9 billion dollars in local, state and federal tax revenue.

Table S1. Total Economic Contribution of Outdoor Recreation in Colorado, by Region (\$millions)

	Northwest	North Central	Metro	Northeast	Southeast	South Central	Southwest	State
Output	\$9,284	\$8,295	\$3,630	\$385	\$1,053	\$4,142	\$2,173	\$34,514
Salaries & Wages	\$3,355	\$2,940	\$1,460	\$116	\$324	\$1,344	\$714	\$12,431
GDP Contribution	\$5,432	\$4,734	\$2,216	\$204	\$580	\$2,282	\$1,242	\$19,931
State/Local Taxes	\$697	\$582	\$259	\$34	\$97	\$341	\$182	\$2,404
Federal Taxes	\$718	\$619	\$295	\$25	\$70	\$258	\$148	\$2,546
Jobs	91,822	78,521	34,057	4,528	12,705	47,017	24,568	313,404

Figure S1. SCORP Regions



¹ Part of the analysis for this study was based on work performed or supported by the Outdoor Industry Association (OIA). (<http://www.outdoorindustry.org/advocacy/recreation/economy.html>) This study uses a broader definition of outdoor recreation, and for this reason the results of these two studies should not be directly compared. Rather, these two studies should be used together to gain a better understanding of the economic contributions of outdoor recreation to the Colorado economy.

Table of Contents

Executive Summary	ii
1. Introduction	1
2. Data Sources & Methods	1
3. Outdoor Recreation Participation	2
4. Outdoor Recreation Expenditures	3
5. Economic Contributions of Outdoor Recreation	4
6. Economic Contributions of Fishing, Hunting, and Wildlife Watching	6
7. Hunting Economic Contributions by Destination County	7
8. Comparison to Previous Studies	11
References	12
Appendix A Definitions for Economic Contribution	13
Appendix B Methodology for Economic Contribution	15
Appendix C Spending Methodology	17
Appendix D Overall Activities Data Summary	21
Appendix E Non-Motorized Activities Data Summary	23
Appendix F Motorized Activities Data Summary	24
Appendix G Selected Activities Data Summary	25
Appendix H Retail Trade Sales by County	29
Appendix I Estimates of Spending and Days by Activity Group	31

1. Introduction

This study, conducted by Southwick Associates for Colorado Parks and Wildlife (CPW), was undertaken to quantify the economic contributions of outdoor recreation in Colorado. This investigation was part of a broader CPW effort to characterize outdoor recreation both statewide and regionally for the Colorado Statewide Comprehensive Outdoor Recreation Plan (SCORP, 2013). Recreation in fishing, hunting, and wildlife watching were of particular interest, and the specific contributions of these three activities were also examined. Additionally, the county-level contributions of hunting were estimated for a more detailed view of the economic contributions of hunting in Colorado.

Part of the analysis for this study was based on work performed or supported by the Outdoor Industry Association (OIA). In particular, the statewide economic contributions relied on data from a 2012 OIA study (OIA, 2011; OIA 2012).² Although components of the analysis presented here relied on OIA data, the results of this study differ somewhat from the state-level results of the OIA study for two reasons. First, this study incorporates a wider range of outdoor recreation activities, which leads to larger economic estimates of outdoor recreation. Second, this study relies principally on the SCORP survey data to characterize participation, and these numbers differ from the OIA-based participation numbers as a consequence of using different data sources. For this reason, the results of these two studies should not be directly compared, but rather should be used together to gain a broader understanding of the economic contributions of outdoor recreation to the Colorado economy.

2. Data Sources & Methods

Outdoor recreation in this study includes a set of 38 activities corresponding to questions in a CPW survey sent to 7,000 Colorado residents in 2013 as part of the Colorado Statewide Comprehensive Outdoor Recreation Plan (SCORP, 2013). Spending in Colorado was estimated by applying spending profiles to participation numbers for the 38 activities included in the 2013 SCORP survey. These activities were combined into 18 activity groups in order to match participation numbers to available spending data. Statewide spending was then estimated using appropriate data sources for each activity group (Appendix D). In constructing spending profiles for each activity, this study largely relied on spending data from two OIA surveys administered for the purpose of quantifying the economic contributions of outdoor recreation with the U.S. and each of the 50 states (OIA, 2011; OIA, 2012). Because this study incorporated a wider range of activities than the OIA study, additional data sources were incorporated in characterizing spending profiles for a number of activities. The estimation of spending varied by activity as a result. Detailed descriptions of these procedures are included in Appendix C.

² The Outdoor Recreation Economy (OIA, 2012).
<http://www.outdoorindustry.org/advocacy/recreation/economy.html>

State-level expenditures were allocated to regions using data that specified the proportion of spending activity within each region. Because outdoor recreationists often make equipment purchases in a different region from their trip destination, equipment and trip-related spending were allocated differently by region. Trip-related spending was allocated using the proportion of activity days by region (SCORP, 2013), while equipment spending was allocated based on the proportion of retail trade sales by region (CDOR, 2012). Details are included in Appendix C.

The spending estimates were analyzed using standard economic models to quantify economic contributions. The definitions of key economic terms are presented in Appendix A. The IMPLAN economic modeling software was used to estimate economic contributions. Details of the economic contribution methodology are presented in Appendix B.

3. Outdoor Recreation Participation

The 2013 SCORP survey of Outdoor Recreation was used to characterize participation in Colorado regionally and statewide for residents of the state (SCORP, 2013). The survey included a set of 38 activities that were grouped into 5 larger categories (Table 1). The survey results suggest that outdoor recreation is very popular among Colorado residents, with an estimated 3.4 million adults (90% of adult residents) having engaged in at least one of the 38 activities in 2012. Trail activities were the most popular, with nearly 83% of adults participating. The Northwest and North Central regions were notable in their popularity, with 54% and 51% of Colorado adults participating in each region respectively.

Table 1. SCORP Survey Activity Groups (SCORP, 2013)

Activity Group	Activities in Group
Trail/Road	Walking, Jogging/Running (outdoors), Hiking/Backpacking, Horseback riding, Road biking, Mountain biking, Off-road motorcycling, ATV riding or 4-wheel driving
Water-based	Swimming (outdoors), Fishing, Power boating, Water skiing, Jet skiing, Sailing, Canoeing, Kayaking, Whitewater rafting, Stand up paddleboarding
Winter	Skiing or snowboarding at a ski area, Backcountry skiing, Sledding/tubing, Ice skating (outdoors), Snowmobiling, Snowshoeing or cross country skiing, Ice fishing
Wildlife-related	Big game hunting, Upland bird and small game hunting, Waterfowl hunting, Wildlife viewing (including birding)
Other Outdoor	Developed/RV camping, Tent camping, Picnicking, Target or skeet shooting, Rock climbing, Team or individual sports (outdoors), Playground activities, Golf, Geocaching

Table 2. SCORP Survey Participants (in thousands) for Activity Groups by Region (SCORP, 2013)

Activity	North					South		State
	Northwest	Central	Metro	Northeast	Southeast	Central	Southwest	
Trail/Road	1,513	1,706	1,140	204	285	1,006	570	3,164
Water-based	694	1,037	454	91	173	509	325	2,188
Winter	1,291	694	245	18	25	325	221	1,921
Wildlife-related	433	429	99	175	85	265	197	1,122
Other Outdoor	1,071	1,320	755	182	190	846	432	2,784
Any Outdoor Activity	2,071	1,962	1,352	423	399	1,274	755	3,434

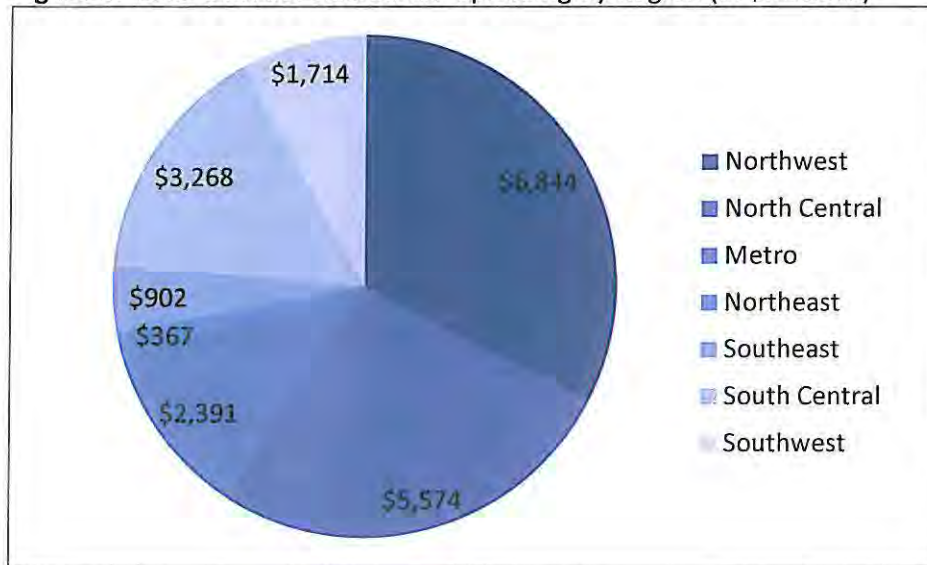
4. Outdoor Recreation Expenditures

The popularity of outdoor recreation by both Colorado residents and nonresidents leads to significant consumer spending in the Colorado economy. Outdoor recreationists in Colorado spent over \$21 billion dollars on trips and equipment in 2012 (Table 3). The Northwest region included the largest amount of outdoor recreation spending at \$6.84 billion, followed by the North Central region at \$5.57 billion (Figure 1). Combined, these two regions accounted for over half of all the outdoor recreation spending within Colorado. Also, because retail sales are concentrated in more populous regions, the ratio of equipment to trip-related sales varies widely from one region to the next (Table 3). Partly as a result of these differences, the nature of economic contributions (e.g., industries impacted, types of jobs supported) varies regionally.

Table 3. Spending by Region (Trip-Related versus Equipment Spending)

	North					South		State
	Northwest	Central	Metro	Northeast	Southeast	Central	Southwest	
Total Spending								
Trip-related	\$6,507	\$4,085	\$1,250	\$301	\$747	\$2,747	\$1,576	\$17,212
Equipment	\$337	\$1,490	\$1,141	\$66	\$156	\$521	\$138	\$3,848
Total	\$6,844	\$5,574	\$2,391	\$367	\$902	\$3,268	\$1,714	\$21,060
Percent Spending by Type								
Trip-related	95.1%	73.3%	52.3%	81.9%	82.8%	84.1%	92.0%	81.7%
Equipment	4.9%	26.7%	47.7%	18.1%	17.2%	15.9%	8.0%	18.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Figure 1. Total Outdoor Recreation Spending by Region (in \$millions)



5. Economic Contributions of Outdoor Recreation

As a result of the economic multiplier effect, the \$21 billion dollars of outdoor recreation expenditures produce additional rounds of economic activity throughout the state's economy. These include indirect contributions, arising from additional spending within industries, and induced contributions, which result from spending of salaries and wages by employees of these industries. These indirect/induced effects total \$13.5 billion, and when combined with direct expenditures, contribute \$34.5 billion dollars to the Colorado economy (Table 4). This total output contributes \$19.9 billion to U.S. Gross Domestic Product (GDP), which amounts to 7.2% of the total GDP contribution of Colorado (BEA, 2013).³

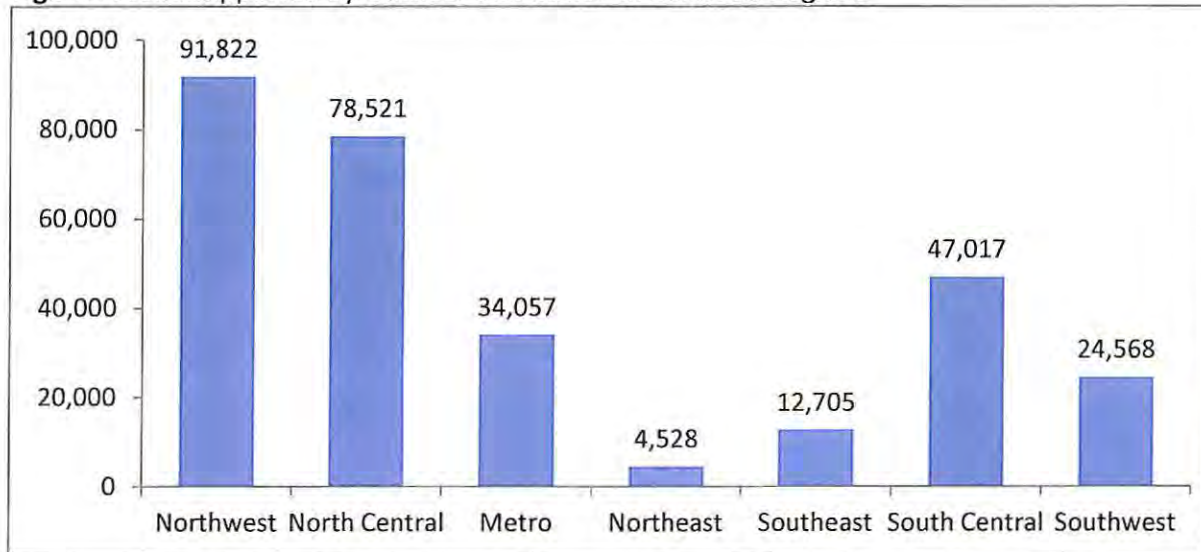
An important result of outdoor recreation spending is the number of jobs supported in the state. An estimated 313,000 jobs in Colorado are supported by outdoor recreation expenditures, which accounts for 13.2% of all jobs in Colorado, larger than the combined construction and manufacturing labor force in the state (BLS, 2013). These jobs are especially important to the economies of specific locales in the state. In the Northwest region alone nearly 92,000 jobs are supported by the total economic contribution of outdoor recreation, representing one third of the entire adult population in that region (Figure 2).

³ GDP contribution is smaller than total output because GDP only measures the costs of final goods and services (i.e., any intermediate products are excluded). While total output is a broader measure of economic activity, GDP contribution is included for comparison to the other GDP-based measures.

Table 4. Economic Contributions by Region (dollar values in \$millions)

	Northwest	North Central	Metro	Northeast	Southeast	South Central	Southwest	State
Direct								
Output	\$6,844	\$5,574	\$2,391	\$367	\$902	\$3,268	\$1,714	\$21,060
Salaries & Wages	\$2,314	\$1,832	\$844	\$93	\$232	\$948	\$520	\$7,097
GDP Contribution	\$3,455	\$2,713	\$1,209	\$153	\$405	\$1,506	\$857	\$10,563
State/Local Taxes	\$504	\$396	\$172	\$28	\$79	\$265	\$144	\$1,545
Federal Taxes	\$478	\$375	\$169	\$19	\$50	\$177	\$106	\$1,420
Jobs	64,247	53,330	23,051	3,780	9,881	35,674	18,420	201,442
Indirect/Induced								
Output	\$2,440	\$2,721	\$1,239	\$18	\$150	\$874	\$459	\$13,454
Salaries & Wages	\$1,041	\$1,109	\$616	\$24	\$92	\$396	\$194	\$5,334
GDP Contribution	\$1,977	\$2,021	\$1,007	\$51	\$175	\$776	\$385	\$9,368
State/Local Taxes	\$193	\$186	\$87	\$6	\$18	\$76	\$38	\$859
Federal Taxes	\$239	\$244	\$126	\$6	\$20	\$82	\$42	\$1,125
Jobs	27,575	25,191	11,006	748	2,825	11,343	6,148	111,962
Total								
Output	\$9,284	\$8,295	\$3,630	\$385	\$1,053	\$4,142	\$2,173	\$34,514
Salaries & Wages	\$3,355	\$2,940	\$1,460	\$116	\$324	\$1,344	\$714	\$12,431
GDP Contribution	\$5,432	\$4,734	\$2,216	\$204	\$580	\$2,282	\$1,242	\$19,931
State/Local Taxes	\$697	\$582	\$259	\$34	\$97	\$341	\$182	\$2,404
Federal Taxes	\$718	\$619	\$295	\$25	\$70	\$258	\$148	\$2,546
Jobs	91,822	78,521	34,057	4,528	12,705	47,017	24,568	313,404

Figure 2. Jobs Supported by Outdoor Recreation in Colorado Regions



6. Economic Contributions of Fishing, Hunting, and Wildlife Watching

Outdoor recreation includes a diverse set of activities that participants pursue in Colorado. Of particular interest for this study are the contributions of fishing, hunting, and wildlife watching. These three activities together produce over \$5 billion dollars of economic output, which supports nearly 50,000 jobs within the state. Wildlife watching alone contributes \$2.2 billion dollars in economic output per year, supporting over 19,000 jobs in Colorado (Table 5).

Table 5. Total Economic Contributions of Fishing, Hunting, and Wildlife Watching by Region

	Northwest	North Central	Metro	Northeast	Southeast	South Central	Southwest	State
<u>Economic Output (\$millions)</u>								
Fishing	\$241	\$523	\$304	\$36	\$131	\$294	\$110	\$1,916
Hunting	\$181	\$208	\$139	\$28	\$35	\$112	\$82	\$919
Wildlife Watching	\$271	\$615	\$282	\$65	\$129	\$361	\$213	\$2,280
<u>Salaries & Wages (\$millions)</u>								
Fishing	\$81	\$178	\$123	\$11	\$39	\$92	\$37	\$673
Hunting	\$72	\$85	\$62	\$10	\$14	\$43	\$31	\$368
Wildlife Watching	\$88	\$197	\$106	\$17	\$37	\$109	\$69	\$771
<u>GDP Contribution (\$millions)</u>								
Fishing	\$134	\$288	\$186	\$18	\$69	\$157	\$63	\$1,081
Hunting	\$112	\$127	\$88	\$16	\$22	\$68	\$51	\$561
Wildlife Watching	\$146	\$329	\$165	\$30	\$66	\$188	\$117	\$1,261
<u>State and Local Taxes (\$millions)</u>								
Fishing	\$17	\$35	\$21	\$3	\$11	\$22	\$9	\$127
Hunting	\$13	\$13	\$9	\$2	\$3	\$8	\$6	\$60
Wildlife Watching	\$18	\$40	\$19	\$5	\$10	\$26	\$16	\$148
<u>Federal Taxes (\$millions)</u>								
Fishing	\$18	\$37	\$25	\$2	\$8	\$18	\$8	\$138
Hunting	\$15	\$17	\$12	\$2	\$3	\$8	\$6	\$73
Wildlife Watching	\$19	\$42	\$22	\$4	\$8	\$21	\$14	\$160
<u>Jobs</u>								
Fishing	2,222	4,698	2,730	347	1,388	2,968	1,119	16,413
Hunting	2,242	2,413	1,375	407	603	1,625	1,346	10,882
Wildlife Watching	2,514	5,501	2,878	657	1,332	3,682	2,135	19,541

Pursuing big game is the most popular form of hunting in Colorado among both residents of the state and those traveling from other locations. Residents make up a majority of days spent hunting big game in the state at 66.8 percent (CPW, 2013a). However, the average nonresident big game hunter spends more money per day than residents. As a result, the economic output contributed by nonresident big game hunters makes up nearly 50 percent of the statewide total (Table 6).

Table 6. Total Economic Contributions of Big Game Hunting in Colorado

	Output (\$millions)	Labor Income (\$millions)	GDP Contribution (\$millions)	State/Local Taxes (\$millions)	Federal Taxes (\$millions)	Jobs
Resident	322.6	111.1	191.5	22.5	26.9	2,953
Nonresident	286.4	133.9	199.2	17.9	29.4	3,895
Total	609.1	244.9	390.6	40.3	56.3	6,848

7. Hunting Economic Contributions by Destination County

Hunting is a popular form of outdoor recreation in Colorado, with participants that are typically active over many years. The type of hunting that Colorado residents and visitors engage in varies greatly by location. Through extensive surveys of hunters, CPW has been able to characterize hunting effort by destination county within the state over a range of species pursued (CPW, 2013a). Using these survey results allowed us to estimate hunter effort by county of activity for three species groups; big game, small game, and waterfowl (Appendix G, Table G2). Pursuing big game is the most popular hunting activity in Colorado, and the Northwest region includes the largest contribution of hunting effort by a fairly large margin (Table 7).

Table 7. Hunting Effort by Region (CPW, 2013a)

	Northwest	North Central	Metro	Northeast	Southeast	South Central	Southwest	State
Hunter Days per Year								
Big Game	671,700	87,785	36,730	45,658	73,131	234,241	341,573	1,490,818
Small Game	104,898	64,725	4,171	114,212	36,398	43,565	37,422	405,391
Waterfowl	15,478	70,607	888	30,437	14,667	7,441	6,213	145,731

The detailed hunting effort data also allowed economic contributions of hunting effort to be examined at the county level. The economic contributions of the top ten counties by total output from hunting are included in Table 8. Detailed contributions for all counties are displayed in Table 9.

Table 8. Top 10 Counties for Total Hunting Economic Contributions by Output

County	Output (\$thousands)	Labor Income (\$thousands)	GDP Contribution (\$thousands)	State/Local Taxes (\$thousands)	Federal Taxes (\$thousands)	Jobs
Arapahoe	\$55,601	\$24,299	\$34,756	\$3,385	\$4,756	580
El Paso	\$51,495	\$21,366	\$31,899	\$3,493	\$3,723	604
Denver	\$44,854	\$20,640	\$28,653	\$2,485	\$3,548	411
Jefferson	\$43,155	\$19,199	\$27,187	\$2,894	\$3,641	513
Larimer	\$38,123	\$14,851	\$23,140	\$2,587	\$3,088	574
Mesa	\$33,688	\$12,468	\$20,007	\$2,438	\$2,694	484
Adams	\$31,593	\$13,852	\$20,171	\$2,704	\$2,163	392
Weld	\$26,164	\$11,396	\$16,433	\$1,793	\$2,156	520
Boulder	\$24,172	\$11,013	\$15,769	\$1,624	\$2,084	296
Garfield	\$22,593	\$9,463	\$14,874	\$1,747	\$2,008	322

Table 9. Total Hunting Economic Contributions by County

County	Output (\$thousands)	Labor Income (\$thousands)	GDP Contribution (\$thousands)	State/Local Taxes (\$thousands)	Federal Taxes (\$thousands)	Jobs
<u>Northwest Region</u>						
Eagle	\$16,523	\$7,225	\$11,118	\$1,259	\$1,576	203
Garfield	\$22,593	\$9,463	\$14,874	\$1,747	\$2,008	322
Grand	\$15,884	\$5,932	\$10,434	\$1,361	\$1,344	237
Jackson	\$4,891	\$1,503	\$2,912	\$595	\$306	62
Mesa	\$33,688	\$12,468	\$20,007	\$2,438	\$2,694	484
Moffat	\$15,628	\$5,809	\$9,262	\$1,091	\$1,323	248
Pitkin	\$5,980	\$2,864	\$4,203	\$452	\$532	70
Rio Blanco	\$13,737	\$6,487	\$9,626	\$1,098	\$1,260	191
Routt	\$19,889	\$8,663	\$13,355	\$1,445	\$1,818	292
Summit	\$6,669	\$2,887	\$4,475	\$500	\$615	103
<u>North Central Region</u>						
Adams	\$31,593	\$13,852	\$20,171	\$2,704	\$2,163	392
Arapahoe	\$55,601	\$24,299	\$34,756	\$3,385	\$4,756	580
Boulder	\$24,172	\$11,013	\$15,769	\$1,624	\$2,084	296
Clear Creek	\$1,997	\$776	\$1,212	\$167	\$172	32
Gilpin	\$636	\$313	\$454	\$50	\$62	15
Larimer	\$38,123	\$14,851	\$23,140	\$2,587	\$3,088	574
Weld	\$26,164	\$11,396	\$16,433	\$1,793	\$2,156	520
<u>Metro Region</u>						
Broomfield	\$4,903	\$2,164	\$3,019	\$280	\$396	57
Denver	\$44,854	\$20,640	\$28,653	\$2,485	\$3,548	411
Douglas	\$20,090	\$9,097	\$12,863	\$1,477	\$1,801	252
Jefferson	\$43,155	\$19,199	\$27,187	\$2,894	\$3,641	513
<u>Northeast Region</u>						
Cheyenne	\$580	\$232	\$387	\$58	\$54	12
Elbert	\$2,013	\$734	\$1,185	\$202	\$151	26
Kit Carson	\$1,816	\$630	\$1,062	\$181	\$135	34
Lincoln	\$2,098	\$767	\$1,270	\$202	\$146	36
Logan	\$4,755	\$1,937	\$2,986	\$384	\$368	91
Morgan	\$5,501	\$2,357	\$3,460	\$402	\$452	116
Phillips	\$879	\$241	\$474	\$83	\$59	10
Sedgwick	\$1,478	\$594	\$928	\$147	\$111	27
Washington	\$1,296	\$452	\$787	\$127	\$94	29
Yuma	\$3,494	\$1,081	\$1,861	\$307	\$218	46

Table 9 (Continued). Total Hunting Economic Contributions by County

County	Output (\$thousands)	Salaries & Wages (\$thousands)	GDP Contribution (\$thousands)	State/Local Taxes (\$thousands)	Federal Taxes (\$thousands)	Jobs
<u>Southeast Region</u>						
Baca	\$1,388	\$524	\$888	\$139	\$97	23
Bent	\$1,220	\$307	\$644	\$159	\$55	13
Crowley	\$416	\$204	\$298	\$38	\$28	10
Huerfano	\$3,264	\$1,079	\$1,944	\$327	\$238	73
Kiowa	\$798	\$193	\$427	\$106	\$54	8
Las Animas	\$5,317	\$2,200	\$3,486	\$460	\$431	127
Otero	\$2,213	\$901	\$1,427	\$199	\$184	54
Prowers	\$1,795	\$688	\$1,090	\$174	\$137	33
Pueblo	\$13,722	\$5,980	\$8,987	\$1,094	\$1,165	190
<u>South Central Region</u>						
Alamosa	\$3,392	\$1,409	\$2,130	\$287	\$265	57
Chaffee	\$6,425	\$2,236	\$3,998	\$556	\$482	133
Conejos	\$3,206	\$1,246	\$2,043	\$316	\$230	67
Costilla	\$1,069	\$452	\$721	\$107	\$82	25
Custer	\$2,744	\$813	\$1,577	\$272	\$199	59
El Paso	\$51,495	\$21,366	\$31,899	\$3,493	\$3,723	604
Fremont	\$5,841	\$2,157	\$3,438	\$529	\$333	87
Lake	\$1,520	\$546	\$936	\$153	\$106	30
Mineral	\$1,222	\$564	\$823	\$108	\$110	32
Park	\$6,944	\$2,156	\$3,995	\$742	\$465	213
Rio Grande	\$3,261	\$1,260	\$2,088	\$291	\$269	94
Saguache	\$6,905	\$2,700	\$4,457	\$696	\$494	184
Teller	\$3,902	\$1,515	\$2,424	\$342	\$319	84
<u>Southwest Region</u>						
Archuleta	\$6,618	\$2,463	\$4,233	\$530	\$520	138
Delta	\$7,303	\$2,630	\$4,532	\$641	\$558	171
Dolores	\$3,583	\$1,396	\$2,179	\$380	\$249	71
Gunnison	\$17,041	\$5,960	\$10,170	\$1,413	\$1,281	277
Hinsdale	\$2,177	\$895	\$1,412	\$231	\$166	47
La Plata	\$11,072	\$4,392	\$6,952	\$833	\$797	162
Montezuma	\$6,059	\$2,230	\$3,726	\$505	\$464	113
Montrose	\$12,021	\$4,621	\$7,609	\$931	\$936	218
Ouray	\$2,644	\$918	\$1,665	\$242	\$202	55
San Juan	\$972	\$257	\$568	\$115	\$66	13
San Miguel	\$4,637	\$1,926	\$3,086	\$367	\$385	63

8. Comparison to Previous Studies

Previous studies have been undertaken to estimate the economic impacts of fishing, hunting, and wildlife watching in Colorado. CPW supported studies in both 2004 and 2008 to estimate these economic contributions (CPW 2004; CPW 2008). Additionally, USFWS estimates expenditures for fishing, hunting, and wildlife watching by state every five years based on a National Survey (USFWS, 2011). The direct expenditure estimates of these three studies are comparable in scope; retail trip and equipment expenditures made by fishing, hunting, and wildlife watchers in a given year. The spending estimates from each of these studies are summarized in Table 10.

Table 10. Estimates of Annual Fishing, Hunting, and Wildlife Watching Expenditures from Comparable Data Sources

Data Source	Fishing and Hunting Expenditures	Wildlife Watching Expenditures
CPW (2004)	\$845,300,000	\$526,000,000
CPW (2008)	\$1,017,800,000	\$703,200,000
USFWS (2011)	\$1,551,577,000	\$1,432,579,000
Current Study	\$1,604,218,256	\$1,322,968,136

Because different studies incorporate different data sources to characterize participation and spending habits of outdoor recreationists, the resulting expenditure estimates vary as a result. The current study relies largely on the USFWS National Survey to characterize average spending for fishers, hunters, and wildlife watchers. Because the participation numbers used in this study are similar to those estimated by USFWS, the overall statewide expenditures estimates are also similar.

References

- BEA (2013). National Economic Accounts. *U.S. Department of Commerce, Bureau of Economic Analysis*. Retrieved on 11-17-2013 from www.bea.gov.
- BLS (2013). State and Metro Area Employment, Hours, and Earnings. *U.S. Department of Labor, Bureau of Labor Statistics*. Retrieved on 11-17-2013 from www.bls.gov.
- CDOR (2012). Colorado Department of Revenue Annual Report. *Colorado Department of Revenue*.
- CPW (2004). The Economic Impacts of Hunting, Fishing and Wildlife Watching in Colorado. *Colorado Parks & Wildlife, BBC Research and Consulting*
- CPW (2008). The Economic Impacts of Hunting, Fishing and Wildlife Watching in Colorado. *Colorado Parks & Wildlife, BBC Research and Consulting*
- CPW (2013a). Hunter days by County. *Colorado Parks & Wildlife*. Unpublished data.
- CPW (2013b). Resident fishing licenses sold in 2012. *Colorado Parks & Wildlife*. Unpublished data.
- Davies, S., Watson, P., Cramer, A., & Thilmany, D. (2004). The Economic Contribution of Colorado's Golf Industry. *Department of Agricultural and Resource Economics*. Fort Collins, CO.
- Martinson, K., Schneider, I., Earing, J., Date, A., & Venegas, E. (2009). Economic Contribution and Demographics of Recreational Horse Trail Users in Minnesota. *University of Minnesota*.
- NGF (2004-2011). Rounds played in the United States. *National Golf Foundation*.
- NSSF (2012). Survey of Target Shooting in the United States. *National Shooting Sports Foundation*. Unpublished raw data.
- OIA (2011). Survey of Outdoor Recreation in the U.S. *Outdoor Industry Association*. Unpublished data.
- OIA (2012). Survey of Outdoor Recreation in U.S. states. *Outdoor Industry Association*. Unpublished data.
- SCORP (2013). Survey of Outdoor Recreation in Colorado. *Colorado Parks & Wildlife, Statewide Comprehensive Outdoor Recreation Plan*. Unpublished data.
- Venegas, E. (2009). Economic Contribution of Recreational Trail Use in Different Regions of Minnesota. *University of Minnesota Tourism Center*.
- USDOL (2013). Consumer Price Index for All Urban Consumers, Annual Average. *U.S. Department of Labor*. Retrieved on 9-17-2013 from <http://www.bls.gov/cpi/>.
- USFWS (2011). 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. *U.S. Fish & Wildlife Service, U.S. Census Bureau*.

Appendix A Definitions for Economic Contribution

Economic benefits can be estimated by two types of economic measures: economic contributions and economic values. An **economic contribution** addresses the business and financial activity resulting from the use of a resource. **Economic value**, on the other hand, is a non-business measure that estimates the value people receive from an activity after subtracting for their costs and expenditures. This concept is also known as consumer surplus.

There are three types of economic contribution: direct, indirect and induced. A **direct contribution** is defined as the economic contribution of the initial purchase made by the consumer (the original retail sale). **Indirect contributions** are the secondary effects generated from a direct contribution, such as the retailer buying additional inventory, and the wholesaler and manufacturers buying additional materials. Indirect contributions affect not only the industry being studied, but also the industries that supply the first industry. An **induced contribution** results from the salaries and wages paid by the directly and indirectly effected industries. The employees of these industries spend their income on various goods and services. These expenditures are induced contributions, which, in turn, create a continual cycle of indirect and induced effects.

The direct, indirect and induced contribution effects sum together to provide the overall economic contribution of the activity under study. As the original retail purchase (direct contribution) goes through round after round of indirect and induced effects, the economic contribution of the original purchase is multiplied, benefiting many industries and individuals. Likewise, the reverse is true. If a particular item or industry is removed from the economy, the economic loss is greater than the original lost retail sale. Once the original retail purchase is made, each successive round of spending is smaller than the previous round. When the economic benefits are no longer measurable, the economic examination ends.

This study presents several important measures:

Retail Sales – these include expenditures made by outdoor recreationists for equipment, travel expenses and services related to their outdoor activities over the course of the year. These combined initial retail sales represent the “direct output”.

Total Economic Effect – also known as “total output” or “total multiplier effect,” this measure reports the sum of the direct, indirect and induced contributions resulting from the original retail sale. This figure explains the total activity in the economy generated by a retail sale. Another way to look at this figure is, if the activity in question were to disappear and participants did not spend their money elsewhere, the economy would contract by this amount.

Salaries & Wages – this figure reports the total salaries and wages paid in all sectors of the economy as a result of the activity under study. These are not just the paychecks of those employees directly serving recreationists or manufacturing their goods, it also includes portions of the paychecks of, for example, the truck driver who delivers food to the restaurants serving recreationists and the accountants who manage the books for companies down the supply chain, etc. This figure is based on the direct, indirect and

induced effects, and is essentially a portion of the total economic effect figure reported in this study.

Jobs – much like Salaries and Wages, this figure reports the total jobs in all sectors of the economy as a result of the activity under study. These are not just the employees directly serving recreationists or manufacturing their goods, they also include, for example, the truck driver who delivers food to the restaurants serving recreationists and the accountants who manage the books for companies down the supply chain, etc. This figure is based on direct, indirect and induced effects.

GDP Contribution – this represents the total “value added” contribution of economic output made by the industries involved in the production of outdoor recreation goods and services. For a given industry, value added equals the difference between gross output (sales and other income) and intermediate inputs (goods and services imported or purchased from other industries). It represents the contribution to GDP in a given industry for production related to outdoor recreation.

Appendix B Methodology for Economic Contribution

The extent of the economic contributions associated with spending for outdoor recreation can be estimated in two ways:

- **Direct effects:** These include the jobs, income and tax revenues that are tied directly to the spending by outdoor recreationists without including multiplier effects.
- **Total effects:** These include the jobs, income and tax revenues that are tied directly to the spending by outdoor recreationists plus the jobs, income and tax revenues that result from the multiplier effects of outdoor recreation spending. The multiplier effect occurs when a direct purchase from a business leads to increased demand for goods and services from other businesses along their supply chain. Also included is economic activity associated with household spending of incomes earned in the affected businesses.

The economic contributions from outdoor recreation, both direct effects and total effects, were estimated with an IMPLAN input-output model for the state and regional economies of Colorado, and the county economies for hunting economic contributions. The IMPLAN model was developed by MIG, Inc. originally for use by the U.S. Forest Service. Inherent in each IMPLAN model is the relationship between the economic output of each industry (i.e. sales) and the jobs, income and taxes associated with a given level of output. Through those models, it is possible to determine the jobs, income and taxes supported directly by wildlife-based recreationists with and without the multiplier effects.

Input-output models describe how sales in one industry affect other industries. For example, once a consumer makes a purchase, the retailer buys more merchandise from wholesalers, who buy more from manufacturers, who, in turn, purchase new inputs and supplies. In addition, the salaries and wages paid by these businesses stimulate more benefits. Simply, the first purchase creates numerous rounds of purchasing. Input-output analysis tracks the flow of dollars from the consumer through all of the businesses that are affected, either directly or indirectly.

To apply the IMPLAN model, each specific expenditure for outdoor recreation activities was matched to the appropriate industry sector affected by the initial purchase. The spending was estimated with models of the Colorado economy, therefore all of the resulting contributions represent salaries and wages, total economic effects, jobs and tax revenues that occur within the state of Colorado. Likewise, models based on specific regions or counties represent the economic effects within the selected region or county. The results do not include any economic activity or indirect contributions that leak out of the state, region, or county of interest. As a result of this leakage, economic contributions at the state level are larger than the sum of corresponding regional or county contributions. This occurs because a portion spending in a particular region (or county) leaks to other regions (or counties) within the state, and this within-state leakage is captured in the Colorado model.

Estimating Tax Revenues

The IMPLAN model estimates detailed tax revenues at the state and local level and at the federal level. The summary estimates provided in this report represent the total taxes estimated by the IMPLAN model including all income, sales, property and other taxes and fees that accrue to the various local, state and federal taxing authorities.

Appendix C Spending Methodology

I. Overview

Spending in Colorado was estimated by applying spending profiles to participation numbers for 18 activity groups (Table D2). The procedure involved first estimating participation and spending at the state level and then allocating spending to each region.

A. Estimating Participation

For the majority of the 18 activity groups, a single data source was not sufficient to characterize both resident and nonresident participation in Colorado (Table D2).⁴ Procedures used to estimate final participation numbers varied between activity groups as a result of differences in the data available for each group. The specific procedures used are detailed within sections II through IV.

B. Estimating Spending at the State Level

Spending profiles for each activity group included a set of expenditures by item for a typical participant. Each spending profile included two components; equipment spending, and trip-related spending.⁵ Spending profiles were applied differently by activity due to differences in source data (Sections II through IV).

C. Allocating Spending to each Region

Spending totals were allocated to regions differently for equipment and trip spending. We assumed that most consumers would not make many equipment purchases during a trip. Instead, they would likely purchase equipment prior to going on a trip. As a result many equipment purchases would be expected to occur in different regions than trip-related purchases. In order to more accurately reflect locations of equipment purchases, we used retail trade sales data by county (CDOR, 2012; Appendix H) to allocate these expenditures regionally. SCORP survey data was used to allocate trip-related expenditures.⁶ The percentages used to allocate regional expenditures are shown in Tables E2, F2, and G3.

Regional Allocation Calculations:

equipment spending in region j = (equipment spending) × (retail trade % in region j)

trip spending in region j = (trip spending) × (participation days % in region j)

⁴ For horseback riding and target shooting, only resident expenditures were estimated in this analysis due to lack of reliable data for characterizing nonresident participation. The resulting underestimation is negligible assuming that nonresident spending for these activities is a small fraction of total spending.

⁵ For golfing, only trip-related expenditures were included because the spending data consisted of purchases made at golf courses only (Davies et al., 2004). As a result, the golf-related spending estimates included in this analysis are likely more conservative than estimates for the other activities.

⁶ For hunting, participation data from Colorado Parks and Wildlife were used to allocate trip-related spending regionally (CPW, 2013a).

II. Non-Motorized Activity Details

Trip spending profiles for non-motorized activities were specified on a per trip basis (OIA, 2012). In order to apply these profiles we estimated the total number of trips (resident/nonresident, day/overnight) taken for each non-motorized activity.

State-level Spending Calculations:

$equipment\ spending = (resident\ participants) \times (equipment\ spending\ profile)$

$trip\ spending = (adjusted\ trips) \times (trip\ spending\ profile)$

Estimating Trips by Activity in Colorado

The SCORP survey was used as the primary data source for participation. In order to align the SCORP data with OIA spending profiles, the days of participation estimates were converted to trip estimates. These were estimated using OIA data that included recreation in the U.S. Mountain Region.⁷

OIA Trip Estimation Data for Non-Motorized Activities:

- Ratio of day to overnight trips
- Average days per overnight trip
- Ratio of nonresident to resident trips

During a single trip a participant might engage in more than one outdoor recreation activity and may or may not spend money during the trip. In order to avoid overestimating expenditures, we accounted for these effects by adjusting the trip estimates using OIA data based on responses from the U.S. Mountain Region:

- Percent of trips where participants spent money
- Percent of trips taken for the primary purpose of the selected activity

State-level Trip Calculations:

1. $average\ day\ trips = (SCORP\ ave\ days) \times (OIA\ \% \ day\ trip\ days)$

2. $average\ overnight\ trips = (SCORP\ ave\ days) \times (OIA\ \% \ overnight\ trip\ days) \div (OIA\ days\ per\ overnight\ trip)$

3. $resident\ trips = (SCORP\ participants) \times (average\ trips)$

4. $nonresident\ trips = (resident\ trips) \times (OIA\ nonresident\ to\ resident\ trip\ ratio)$

5. $adjusted\ trips =$

$(trips) \times (OIA\ \% \ trips\ with\ money\ spent) \times (OIA\ \% \ primary\ purpose\ trips) \times (0.1 \times OIA\ \% \ non\ primary\ purpose\ trips)$

⁷ Because OIA survey sample sizes for Colorado were small, data on the 7 states in the Mountain Region (Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming) were included to produce more robust estimates.

III. Motorized Activity Details

Spending for motorized activities was estimated using the non-motorized activity procedure, with 2 additional steps. Because a particular motorized vehicle is often used for outdoor recreation as well as other purposes, additional adjustments were made to exclude the economic contributions of non-outdoor recreation related activities and also to reallocate part of motorized vehicle expenditures to relevant outdoor recreation categories (e.g., powerboat expenditures used for fishing).⁸ These adjustments were made using OIA survey data for activity responses in the U.S. Mountain Region.

A. Adjusting Trip Estimates to Exclude Non-Outdoor Recreation

In the OIA survey respondents were asked to identify the percentage of trips by motorized activity for 4 primary purposes (outdoor recreation, cruising, special events, or other uses). The final trip estimation was adjusted by excluding the percentage for “special events” and “other uses.”

Final Trip Calculation:

$$\text{final trips} = (\text{adjusted trips}) \times (\% \text{ cruising trips} + \% \text{ outdoor recreation trips})$$

B. Reallocating Contributions to Non-motorized Activities

In order to attribute motorized expenditures made for the purposes of other outdoor activities (e.g., fishing, hunting, etc.) a portion of the motorized economic contributions were reallocated to 8 non-motorized activities. The “outdoor recreation” portion of each motorized activity was allocated to non-motorized activities based on an OIA survey question indicating the proportion of outdoor recreation trips for each activity.

Reallocation Calculation:

$$\% \text{ allocated to nonmotor activity } j = (\text{economic estimate for motor activity}) \times (\% \text{ outdoor recreation trips}) \div (\% \text{ cruising trips}) \times (\% \text{ outdoor trips for activity } j)$$

IV. Selected Activity Details

Spending for each activity in the “selected” group was estimated in a unique way due to the particular nature of the data that were used. Each of the following 6 sub-sections includes the estimation details for the corresponding activity.

⁸ For equipment expenditures, a primary purpose adjustment was included when constructing spending profiles. For this reason, no additional adjustments were made to equipment spending in order to exclude contributions of non-outdoor recreation related activities.

A. Fishing

In 2012 there were 739,885 resident anglers who purchases fishing licenses in Colorado (CPW, 2013b). The ratio of resident to nonresident anglers in Colorado, taken from the 2011 USFWS National survey, was used to produce the estimate of 218,286 nonresident anglers. The per participant spending profile (excluding motorized items) from the National Survey was applied to estimate total fishing spending at the state level.

B. Hunting

Hunting spending profiles were constructed using the USFWS 2011 National Survey. Hunter days by county (Table G2) were combined to estimate total hunter days in Colorado for residents and nonresidents combined (CPW, 2013a). For each hunting type (big game, small game, and waterfowl) hunter day estimates were applied to the respective spending profiles to estimate total spending for hunting in Colorado.⁹ Trip spending by county was allocated using CPW participation estimates, and equipment spending by county was allocated using county trade sales data (CDOR, 2012; Appendix H).

C. Wildlife Watching

An estimated 713,581 Colorado residents participated in wildlife watching within the state in 2013 (SCORP, 2013). The ratio of resident to nonresident wildlife viewers in Colorado, taken from the 2011 USFWS National survey, was used to produce the estimate of 451,129 nonresident wildlife viewers. Spending for wildlife watching was estimated by using the non-motorized per participant spending profile taken from the 2011 USFWS National Survey.

D. Golfing

Spending for golfing was characterized by updating an estimate of total spending at golf courses in Colorado in 2002 (Davies et al., 2004). The 2002 estimate was adjusted to 2011 dollars using consumer price indices (USDOL, 2013). An adjustment for change in participation was applied based on rounds played data produced annually from 2004 to 2011 (National Golf Foundation).

E. Horseback Riding

The horseback riding spending profile was based on a 2009 study that included trip spending estimates by day (Venegas et al., 2009) and annual equipment spending estimates by person (Martinson et al., 2009) for horseback riders in Minnesota. These profiles were adjusted to 2011 dollars using consumer price indices (USDOL, 2013). Participation was characterized using the 2013 SCORP survey (Table G1).

F. Target Shooting

A recent survey by the National Shooting Sports Foundation was used to estimate spending profiles for target shooters in Colorado (NSSF, 2012). Spending and participation data for Colorado residents were used to construct the target shooter spending profile. This profile was applied to the 2013 SCORP participation numbers to estimate total spending.

⁹ The “migratory bird” spending profile from the 2011 USFWS National Survey was used to estimate waterfowl expenditures.

Appendix D Overall Activities Data Summary

Table D1. SCORP Outdoor Recreation Activities and Combined Activity Groups

SCORP Survey Activity	Activity Group for Economic Estimates
<u>Trail</u>	
Walking	Trail (apparel only)
Jogging/Running (outdoors)	Trail (apparel only)
Hiking/Backpacking	Trail
Horseback riding	Horseback Riding
Road biking	Biking
Mountain biking	Biking
Off-road motorcycling	Off-road (motorcycle)
ATV riding or 4-wheel driving	Off-road (other)
<u>Water-based</u>	
Swimming (outdoors)	Trail (apparel only)
Fishing	Fishing
Power boating	Boating
Water skiing	Boating
Jet skiing	Boating
Sailing	Water Sports
Canoeing	Water Sports
Kayaking	Water Sports
Whitewater rafting	Water Sports
Stand up paddleboarding	Water Sports
<u>Winter</u>	
Skiing or snowboarding at a ski area	Snow Sports
Backcountry skiing	Snow Sports
Sledding/tubing	Snow Sports (apparel only)
Ice skating (outdoors)	Snow Sports (apparel only)
Snowmobiling	Snowmobiling
Snowshoeing or cross country skiing	Snow Sports
Ice fishing	Fishing
<u>Wildlife-based</u>	
Big game hunting	Hunting
Upland bird and small game hunting	Hunting
Waterfowl hunting	Hunting
Wildlife Watching (including birding)	Wildlife Watching
<u>Other Outdoor</u>	
Developed/RV camping	RV Camping
Tent camping	Tent Camping
Picnicking	Trail (apparel only)
Target or skeet shooting	Target Shooting
Rock climbing	Trail
Team or individual sports (outdoors)	Trail (apparel only)
Playground activities	Trail (apparel only)
Golf	Golfing
Geocaching	Trail (apparel only)

Note: For "apparel only" categories, only apparel expenditures were included in the economic estimates.

Table D2. Data Sources Used to Estimate Participation and Spending Profiles

Activity Group	Spending Profile Data Sources	Participation Data Sources
<u>Motorized Activities</u>		
Boating	OIA (2011)	SCORP (2013), OIA (2012)
Off-road (motorcycle)	OIA (2011)	SCORP (2013), OIA (2012)
Off-road (other)	OIA (2011)	SCORP (2013), OIA (2012)
RV Camping	OIA (2011)	SCORP (2013), OIA (2012)
Snowmobiling	OIA (2011)	SCORP (2013), OIA (2012)
<u>Non-Motorized Activities</u>		
Biking	OIA (2011)	SCORP (2013), OIA (2012)
Snow Sports	OIA (2011)	SCORP (2013), OIA (2012)
Snow Sports (apparel only)	OIA (2011)	SCORP (2013), OIA (2012)
Tent Camping	OIA (2011)	SCORP (2013), OIA (2012)
Trail	OIA (2011)	SCORP (2013), OIA (2012)
Trail (apparel only)	OIA (2011)	SCORP (2013), OIA (2012)
Water Sports	OIA (2011)	SCORP (2013), OIA (2012)
<u>Selected Activities</u>		
Fishing	USFWS (2011)	CPW (2013b), SCORP (2013), USFWS (2011)
Hunting	USFWS (2011)	CPW (2013a)
Wildlife Watching	USFWS (2011)	SCORP (2013), USFWS (2011)
Golfing	Davies (2004)	SCORP (2013), Davies (2004), NGF (2004-2011)
Horseback Riding	Venegas (2009), Martinson (2009)	SCORP (2013)
Target Shooting	NSSF (2012)	SCORP (2013)

Appendix E Non-Motorized Activities Data Summary

Table E1. SCORP Survey Annual Non-Motorized Participation

	Northwest	North Central	Metro	Northeast	Southeast	South Central	Southwest	State
<u>Numbers of Participants (thousands)</u>								
Biking	400	658	482	53	98	245	127	1,386
Tent Camping	593	582	123	16	59	411	231	1,357
Snow Sports	1,133	493	75	5	8	232	165	1,533
Trail Sports	1,073	1,077	360	48	85	645	355	2,066
Water Sports	214	208	74	1	53	155	146	625
Trail (apparel only)	1,095	1,424	1,129	271	251	721	388	3,043
Snow (apparel only)	256	278	174	12	13	70	46	709
<u>Average Days per Participant</u>								
Biking	17.1	27.2	27.2	18.1	21.8	20.1	18.4	34.8
Tent Camping	7.3	7.1	5.5	6.4	6.0	7.4	6.8	10.4
Snow Sports	13.2	9.1	6.0	1.6	6.1	9.3	11.4	15.6
Trail Sports	12.1	16.4	15.9	7.6	11.4	15.3	10.8	24.9
Water Sports	9.7	8.9	7.7	5.1	12.0	14.4	7.1	13.5
<u>Number of Respondents</u>								
Biking	117	87	72	17	27	60	75	316
Tent Camping	128	64	20	11	22	93	102	329
Snow Sports	234	69	10	4	8	61	109	399
Trail Sports	249	150	60	18	33	160	180	531
Water Sports	67	29	13	3	14	34	56	177
Trail (apparel only)	310	219	193	105	104	213	242	875
Snow (apparel only)	58	27	21	6	5	16	44	159

Table E2. Regional Spending Allocation for Non-Motorized Activities

	Northwest	North Central	Metro	Northeast	Southeast	South Central	Southwest	State
<u>Equipment Spending</u>								
All Activities	8.8%	38.7%	29.7%	1.7%	4.0%	13.5%	3.6%	100.0%
<u>Trip Spending</u>								
Biking	14.2%	37.1%	27.2%	2.0%	4.4%	10.2%	4.8%	100.0%
Tent Camping	30.4%	29.0%	4.8%	0.7%	2.5%	21.4%	11.1%	100.0%
Snow Sports	62.2%	18.8%	1.9%	0.0%	0.2%	9.0%	7.9%	100.0%
Trail Sports	25.3%	34.3%	11.2%	0.7%	1.9%	19.2%	7.5%	100.0%
Water Sports	24.7%	22.0%	6.8%	0.1%	7.6%	26.6%	12.2%	100.0%

Appendix F Motorized Activities Data Summary

Table F1. SCORP Survey Annual Motorized Participation

	Northwest	North Central	Metro	Northeast	Southeast	South Central	Southwest	State
<u>Numbers of Participants</u>								
Boating	172,199	235,905	92,424	31,770	58,216	62,827	31,206	556,489
Off-road (motorcycle)	108,927	23,828	12,286	17,713	14,755	41,996	18,615	213,490
Off-road (other)	277,655	158,497	24,082	52,996	87,963	225,052	167,565	646,152
RV Camping	271,326	184,777	66,372	54,738	56,780	140,125	113,905	562,840
Snowmobiling	125,882	4,928	4,721	482	1,753	39,871	48,150	191,592
<u>Average Days per Participant</u>								
Boating	8.3	11.8	18.8	20.1	39.1	30.8	14.2	20.2
Off-road (motorcycle)	7.5	4.2	14.7	6.0	8.7	20.9	11.1	11.3
Off-road (other)	12.1	14.2	15.9	14.5	16.8	13.4	11.5	20.4
RV Camping	6.3	7.9	4.9	4.6	5.9	10.7	7.8	11.5
Snowmobiling	6.1	27.4	10.0	20.0	5.3	12.3	10.4	10.2
<u>Number of Respondents</u>								
Boating	43	27	17	15	16	13	31	141
Off-road (motorcycle)	22	6	3	4	6	17	19	61
Off-road (other)	92	32	6	13	22	66	101	240
RV Camping	84	37	17	10	25	59	73	212
Snowmobiling	33	2	2	1	2	5	26	66

Table F2. Regional Spending Allocation for Motorized Activities

	Northwest	North Central	Metro	Northeast	Southeast	South Central	Southwest	State
<u>Equipment Spending</u>								
All Activities	8.8%	38.7%	29.7%	1.7%	4.0%	13.5%	3.6%	100.0%
<u>Trip Spending</u>								
Boating	12.7%	24.8%	15.5%	5.7%	20.2%	17.2%	3.9%	100.0%
Off-road (motorcycle)	33.9%	4.2%	7.4%	4.4%	5.3%	36.3%	8.5%	100.0%
Off-road (other)	25.6%	17.0%	2.9%	5.8%	11.2%	22.8%	14.6%	100.0%
RV Camping	26.4%	22.6%	5.1%	3.9%	5.2%	23.1%	13.7%	100.0%
Snowmobiling	39.0%	6.9%	2.4%	0.5%	0.5%	25.1%	25.6%	100.0%

Appendix G Selected Activities Data Summary

Table G1. Participation for Selected Activities (SCORP, 2013)

	Northwest	North Central	Metro	Northeast	Southeast	South Central	Southwest	State
<u>Numbers of Participants</u>								
Fishing	406,418	634,220	182,522	67,415	142,606	428,749	240,813	1,399,845
Golfing	171,190	259,190	251,529	23,900	36,718	161,947	42,547	713,581
Horseback Riding	105,052	129,865	53,406	25,340	8,745	66,666	20,585	282,247
Hunting	252,899	166,360	13,660	148,581	73,799	135,314	103,885	593,619
Shooting	89,653	259,045	35,765	31,943	40,822	119,859	52,738	520,724
Wildlife Watching	218,917	304,051	89,706	43,355	56,542	192,707	143,801	733,220
<u>Average Days per Participant</u>								
Fishing	12.6	12.6	18.2	6.9	16.8	15.9	11.7	20.7
Golfing	8.2	13.6	9.5	16.6	9.2	15.7	13.4	15.7
Horseback Riding	7.7	6.6	8.1	8.2	10.2	3.9	11.0	10.2
Hunting	10.1	10.4	28.1	6.9	20.6	13.3	14.1	17.6
Shooting	11.3	9.3	3.6	8.6	17.1	12.9	5.5	12.2
Wildlife Watching	9.8	12.7	10.2	16.3	20.2	17.3	16.2	19.7
<u>Number of Respondents</u>								
Fishing	151	111	37	37	57	129	138	482
Golfing	63	39	51	21	20	47	39	222
Horseback Riding	25	14	4	13	7	12	26	85
Hunting	86	32	6	59	27	48	80	255
Shooting	34	31	11	28	18	35	32	167
Wildlife Watching	87	56	19	35	21	62	96	272

Note: Not all of the above numbers were included in specifying participation for this analysis (see Appendix D, Section IV for details).

Table G2. Hunting Participation by County in Hunter Days (CPW, 2013a)

County	Big Game	Small Game	Waterfowl
<u>Northwest Region</u>			
Eagle	64,716	7,164	1,486
Garfield	91,843	9,828	1,978
Grand	87,672	4,445	1,952
Jackson	50,316	3,054	905
Mesa	73,920	40,582	6,062
Moffat	75,224	23,974	1,659
Pitkin	27,286	1,342	47
Rio Blanco	87,070	2,685	740
Routt	92,686	7,659	508
Summit	20,967	4,165	142
<u>North Central Region</u>			
Adams	3,645	3,300	6,570
Arapahoe	4,768	4,141	675
Boulder	9,597	8,711	5,448
Clear Creek	7,552	4,420	0
Gilpin	4,763	1,132	0
Larimer	49,027	13,145	13,886
Weld	8,433	29,876	44,028
<u>Metro Region</u>			
Broomfield	485	0	0
Denver	1,890	43	132
Douglas	9,484	1,190	644
Jefferson	24,871	2,938	113
<u>Northeast Region</u>			
Cheyenne	4,577	649	0
Elbert	7,876	2,141	126
Kit Carson	5,080	9,509	180
Lincoln	8,134	3,856	105
Logan	4,313	20,011	8,138
Morgan	5,160	17,345	17,266
Phillips	581	8,739	97
Sedgwick	2,260	14,902	2,816
Washington	3,916	10,249	347
Yuma	3,761	26,811	1,360

Table G2 (Continued). Hunting Participation by County in Hunter Days (CPW, 2013a)

County	Big Game	Small Game	Waterfowl
<u>Southeast Region</u>			
Baca	5,411	4,036	125
Bent	4,493	7,211	2,786
Crowley	2,606	646	710
Huerfano	15,833	574	150
Kiowa	5,154	1,034	558
Las Animas	22,841	2,019	1,710
Otero	3,619	6,469	2,766
Prowers	2,833	4,735	1,300
Pueblo	10,341	9,674	4,564
<u>South Central Region</u>			
Alamosa	6,982	2,887	1,422
Chaffee	22,696	4,533	889
Conejos	20,704	2,860	131
Costilla	7,571	65	237
Custer	12,729	1,821	173
El Paso	17,677	4,313	548
Fremont	20,682	3,359	265
Lake	5,584	5,963	14
Mineral	10,515	374	38
Park	34,735	5,648	1,122
Rio Grande	14,265	5,340	1,348
Saguache	46,775	3,713	972
Teller	13,326	2,690	279
<u>Southwest Region</u>			
Archuleta	30,091	6,864	62
Delta	33,894	5,314	2,509
Dolores	25,501	1,598	0
Gunnison	83,731	4,723	603
Hinsdale	16,192	122	0
La Plata	37,096	5,278	446
Montezuma	22,293	2,710	119
Montrose	45,767	7,486	2,412
Ouray	14,891	258	20
San Juan	9,148	926	0
San Miguel	22,969	2,142	43

Table G3. Regional Spending Allocation for Miscellaneous Activities

	Northwest	North Central	Metro	Northeast	Southeast	South Central	Southwest	State
<u>Equipment Spending</u>								
All Activities	8.8%	38.7%	29.7%	1.7%	4.0%	13.5%	3.6%	100.0%
<u>Trip Spending</u>								
Fishing	17.7%	27.6%	11.5%	1.6%	8.3%	23.5%	9.8%	100.0%
Golfing	12.6%	31.6%	21.4%	3.6%	3.0%	22.7%	5.1%	100.0%
Horseback Riding	28.0%	29.6%	15.1%	7.3%	3.1%	9.0%	7.8%	100.0%
Shooting	16.0%	37.9%	2.0%	4.3%	10.9%	24.3%	4.6%	100.0%
Wildlife Watching	14.8%	26.8%	6.3%	4.9%	7.9%	23.1%	16.2%	100.0%
<u>Trip Spending for Hunting</u>								
Big Game	45.1%	5.9%	2.5%	3.1%	4.9%	15.7%	22.9%	100.0%
Small Game	25.9%	16.0%	1.0%	28.2%	9.0%	10.7%	9.2%	100.0%
Waterfowl	10.6%	48.4%	0.6%	20.9%	10.1%	5.1%	4.3%	100.0%

Table G4. Trail Activities Participation by Percent of Population

Trail Activities	Northwest	North Central	Metro	Northeast	Southeast	South Central	Southwest	State
<u>Non-Motorized</u>								
Walking	69.3%	69.0%	63.0%	48.0%	54.5%	68.9%	74.5%	66.3%
Jogging/Running	26.7%	32.8%	36.5%	13.1%	17.1%	26.8%	17.7%	30.8%
Hiking/Backpacking	64.4%	57.0%	48.5%	17.5%	23.6%	54.0%	52.3%	51.9%
Horseback riding	9.9%	7.4%	8.4%	5.6%	4.5%	4.1%	12.8%	7.4%
Mountain biking	30.0%	26.2%	18.5%	4.7%	12.6%	19.9%	27.3%	22.1%
Snowshoe/X-Country Ski	30.6%	23.9%	12.9%	1.3%	4.4%	10.3%	26.6%	17.7%
Any Non-motorized Trail	89.1%	81.9%	80.4%	54.0%	60.5%	84.2%	84.2%	80.8%
<u>Motorized</u>								
Off-road motorcycling	11.5%	3.8%	6.2%	5.7%	5.9%	5.5%	7.3%	5.6%
ATV/4-wheel driving	30.5%	11.6%	14.9%	11.2%	21.2%	24.1%	28.6%	16.9%
Any Motorized Trail	33.4%	13.0%	15.4%	12.4%	22.9%	27.6%	32.2%	18.6%
<u>Combined</u>								
Any Trail	93.7%	82.7%	81.0%	57.5%	66.7%	86.3%	90.4%	82.6%

Appendix H Retail Trade Sales by County

Table H1. Retail Trade Sales by County (CDOR, 2012)

County	Trade Sales	% of State Total
<u>Northwest Region</u>		
Eagle	\$895,221	1.35%
Garfield	\$1,011,264	1.52%
Grand	\$160,955	0.24%
Jackson	\$10,543	0.02%
Mesa	\$2,183,408	3.29%
Moffat	\$189,238	0.29%
Pitkin	\$348,020	0.52%
Rio Blanco	\$55,190	0.08%
Routt	\$348,346	0.53%
Summit	\$608,117	0.92%
<u>North Central Region</u>		
Adams	\$5,697,508	8.59%
Arapahoe	\$8,889,189	13.40%
Boulder	\$3,855,848	5.81%
Clear Creek	\$81,823	0.12%
Gilpin	\$11,236	0.02%
Larimer	\$4,038,476	6.09%
Weld	\$3,106,335	4.68%
<u>Metro Region</u>		
Broomfield	\$1,008,975	1.52%
Denver	\$7,613,904	11.48%
Douglas	\$3,982,905	6.00%
Jefferson	\$7,069,549	10.66%
<u>Northeast Region</u>		
Cheyenne	\$14,220	0.02%
Elbert	\$146,396	0.22%
Kit Carson	\$88,029	0.13%
Lincoln	\$139,613	0.21%
Logan	\$284,896	0.43%
Morgan	\$306,094	0.46%
Phillips	\$17,258	0.03%
Sedgwick	\$24,757	0.04%
Washington	\$13,663	0.02%
Yuma	\$106,949	0.16%

Table H1 (Continued). Retail Trade Sales by County (CDOR, 2012)

County	Trade Sales	% of State Total
<u>Southeast Region</u>		
Baca	\$41,540	0.06%
Bent	\$23,059	0.03%
Crowley	\$16,568	0.02%
Huerfano	\$65,846	0.10%
Kiowa	\$11,709	0.02%
Las Animas	\$170,706	0.26%
Otero	\$191,333	0.29%
Prowers	\$160,785	0.24%
Pueblo	\$2,000,847	3.02%
<u>South Central Region</u>		
Alamosa	\$342,012	0.52%
Chaffee	\$263,645	0.40%
Conejos	\$34,653	0.05%
Costilla	\$12,090	0.02%
Custer	\$23,201	0.03%
El Paso	\$7,525,106	11.34%
Fremont	\$340,110	0.51%
Lake	\$47,375	0.07%
Mineral	\$9,286	0.01%
Park	\$65,577	0.10%
Rio Grande	\$75,314	0.11%
Saguache	\$25,219	0.04%
Teller	\$211,815	0.32%
<u>Southwest Region</u>		
Archuleta	\$115,808	0.17%
Delta	\$290,862	0.44%
Dolores	\$18,303	0.03%
Gunnison	\$189,076	0.28%
Hinsdale	\$8,848	0.01%
La Plata	\$741,886	1.12%
Montezuma	\$361,865	0.55%
Montrose	\$527,781	0.80%
Ouray	\$26,853	0.04%
San Juan	\$5,950	0.01%
San Miguel	\$90,829	0.14%

Appendix I Estimates of Spending and Days by Activity Group¹⁰

Table I1. Estimated Annual Activity Days in Colorado

Activity Group	Residents	Nonresidents	Total
<u>Motorized Activities</u>			
Motorized Boating	11,252,974	6,998,784	18,251,757
Off-Road Motorcycles	2,420,919	1,385,487	3,806,406
ATVs	13,190,020	8,251,407	21,441,427
Recreational Vehicles	6,474,549	11,316,801	17,791,351
Snowmobiles	1,955,665	4,134,048	6,089,713
<u>Non-Motorized Activities</u>			
Biking	48,170,190	21,637,784	69,807,974
Camping	14,158,319	12,426,131	26,584,450
Snow Sports	23,983,623	37,480,193	61,463,816
Trail Activities	51,512,396	41,176,069	92,688,465
Water Sports	8,412,174	14,910,582	23,322,756
<u>Selected Activities</u>			
Fishing	9,352,587	1,177,307	10,529,894
Hunting	1,452,438	589,503	2,041,940
Wildlife Watching	6,123,666	2,820,877	8,944,543
Horseback Riding	2,874,784	N/A	2,874,784
Target Shooting	4,488,592	N/A	4,488,592

¹⁰ Golfing is excluded from these tables because estimates in terms of days of golfing were not incorporated in this study.

Table 12. Estimated Spending per Day of Activity in Colorado

Activity Group	Average Spending per Day
<u>Motorized Activities</u>	
Motorized Boating	\$36.05
Off-Road Motorcycles	\$37.99
ATVs	\$49.66
Recreational Vehicles	\$18.73
Snowmobiles	\$23.17
<u>Non-Motorized Activities</u>	
Biking	\$19.59
Camping	\$73.75
Snow Sports	\$118.32
Trail Activities	\$24.43
Water Sports	\$56.04
<u>Selected Activities</u>	
Fishing	\$103.16
Hunting	\$253.67
Wildlife Watching	\$147.91
Horseback Riding	\$253.81
Target Shooting	\$55.45

A Research Paper by



West is Best

How Public Lands in the West Create a Competitive Economic Advantage



November 2012

West is Best

How Public Lands in the West Create a Competitive Economic Advantage

November 2012

PUBLISHED ONLINE

<http://headwaterseconomics.org/land/west-is-best-value-of-public-lands>

ABOUT HEADWATERS ECONOMICS

Headwaters Economics is an independent, nonprofit research group whose mission is to improve community development and land management decisions in the West.

CONTACT INFORMATION

Ray Rasker | ray@headwaterseconomics.org | 406-570-7044



P.O. Box 7059, Bozeman, MT 59771

<http://headwaterseconomics.org>

TABLE OF CONTENTS

I. Executive Summary	1
II. Introduction.	2
III. The West Outpaces the Rest of the U.S.	3
IV. Public Lands Are Abundant in the West	4
V. The West’s Rise Is Driven by Expanding Services Industries	6
VI. Services Industries Predominate in Most Western Counties	10
VII. Non-Labor Income Is a Major Driver of Growth	12
VIII. The West Is Growing and Attracting New Residents.	14
IX. A New Competitive Advantage in the West	15
X. Business Location Decisions Are Tied to Quality of Life	16
XI. Protected Public Lands Are an Economic Advantage	19
XII. References	21

TABLE OF FIGURES

Figure 1: West vs. Non-West, Employment Growth, Indexed, 1970 to 2010	3
Figure 2: West vs. Non-West, Growth Measures, 1970 to 2010.	3
Figure 3: Percent Land in Federal Ownership, West vs. Non-West	4
Map 1: Federal Lands and Protected Federal Lands, United States	4
Map 2: Metro and Non-Metro Counties, The West	5
Figure 4: Services vs. Non-Services Employment Growth, West, 1970 to 2010	7
Figure 5: Change in Employment by Industry, West, 2001 to 2010.	7
Figure 6: Employment by Industry Percent of Total, West, 2010	8
Figure 7: Services vs. Non-Services Employment Growth, Non-Metro West, 1970 to 2010	8
Figure 8: Change in Employment by Industry, Non-Metro West, 2001 to 2010	9
Figure 9: Employment by Industry Percent of Total, Non-Metro West, 2010.	9
Figure 10: Number and Share of Western Counties Reliant on Services and High Wage Services Sectors, 2010	10
Figure 11: High-Wage Services, Average Earnings per Job, West, 2010	11
Figure 12: Labor Earnings and Non-Labor Income Trends, West, 1970 to 2010	12
Figure 13: Number and Share of Western Counties Reliant on Non-Labor Income, 2010	12
Figure 14: Per Capita Income Trends, West, 1970 to 2010	13
Figure 15: Population Trends, West, 1970 to 2010	14
Figure 16: Number and Share of Western Counties Reliant on In-Migration, 2000 to 2010	14
Figure 17: Percent Change in Employment, Non-Metro West, 1970 to 2010.	19
Figure 18: Avg. Increase in Per Capita Income from Protected Public Lands, Non-Metro West, 2010.	20

I. EXECUTIVE SUMMARY

This report finds that the West's popular national parks, monuments, wilderness areas and other public lands offer its growing high-tech and services industries a competitive advantage, which is a major reason why the western economy has outperformed the rest of the U.S. economy in key measures of growth—employment, population, and personal income—during the last four decades.

In addition, as the West's economy shifts toward a knowledge-based economy, new research shows that protected federal public lands support faster rates of job growth and are correlated with higher levels of per capita income.

General findings:

- Higher-wage services industries, such as high-tech and health care, are leading the West's job growth and diversifying the economy.
- Entrepreneurs and talented workers are choosing to work where they can enjoy outdoor recreation and natural landscapes.
- Increasingly, chambers of commerce and economic development associations in every western state are using the region's national parks, monuments, wilderness areas and other public lands as a tool to lure companies to relocate.
- High-wage services industries also are using the West's national parks, monuments, wilderness areas and other public lands as a tool to recruit and retain innovative, high-performing talent.

Specific points:

- From 1970 to 2010, the West's employment grew by 152 percent compared to 78 percent for the rest of the country.
- This western job growth was almost entirely in services industries such as health care, real estate, high-tech, and finance and insurance, which created 19.3 million net new jobs, many of them high-paying.
- Western non-metropolitan counties with more than 30 percent of the county's land base in federal protected status such as national parks, monuments, wilderness, and other similar designations increased jobs by 345 percent over the last 40 years. By comparison, similar counties with no protected federal public lands increased employment by 83 percent.
- In 2010, per capita income in western non-metropolitan counties with 100,000 acres of protected public lands is on average \$4,360 higher than per capita income in similar counties with no protected public lands.

Additional Resources

For information on the economic role of protected public lands:

<http://headwaterseconomics.org/land/reports/protected-lands-value/>

For information on the economics of national parks:

<http://headwaterseconomics.org/headwaters/economic-impact-of-national-parks/>

For information on the economics of national monuments:

<http://headwaterseconomics.org/land/reports/national-monuments/>

For a letter from more than 100 economists and academics to the President on the importance of protected public lands:

<http://headwaterseconomics.org/land/economists-president-public-lands/>

II. INTRODUCTION

In this report the “West” is defined as the eleven western public lands states in the continental U.S.: Arizona, Colorado, California, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

The western economy has outperformed the rest of U.S. economy in key measures of growth—employment, population, and personal income—during the last four decades. The region has prospered by successfully diversifying its economy to include fast-growing and higher-paying services industries—such as high-tech, finance, and health care jobs—and attracting talent and entrepreneurs who incubate tomorrow’s companies.

As the West continues to shift from a natural resource-based economy to a knowledge-based economy, the key to the region’s competitiveness is increasingly the ability to cultivate and attract innovative companies and an educated workforce. Research shows that these companies and individuals are increasingly “footloose” and are drawn to the West’s high quality of life, which includes outdoor recreational opportunities and attractive natural landscapes.

“In the ebb and flow of the global economy, states can no longer rely solely on strategies of keeping costs low and providing incentives.... Instead, states must create the right business climate that allows companies and entrepreneurs to create 21st century jobs.”¹

—U.S. Chamber of Commerce, Enterprising States 2012

In the fierce global competition for business and talent today, the West has a clear competitive advantage in its public lands. The West has more federal public lands, and protected public lands such as national parks and monuments, than any other region of the country. These lands offer access to hiking, fishing, hunting, skiing, boating, and other forms of recreation, and provide a scenic backdrop to the region’s communities.

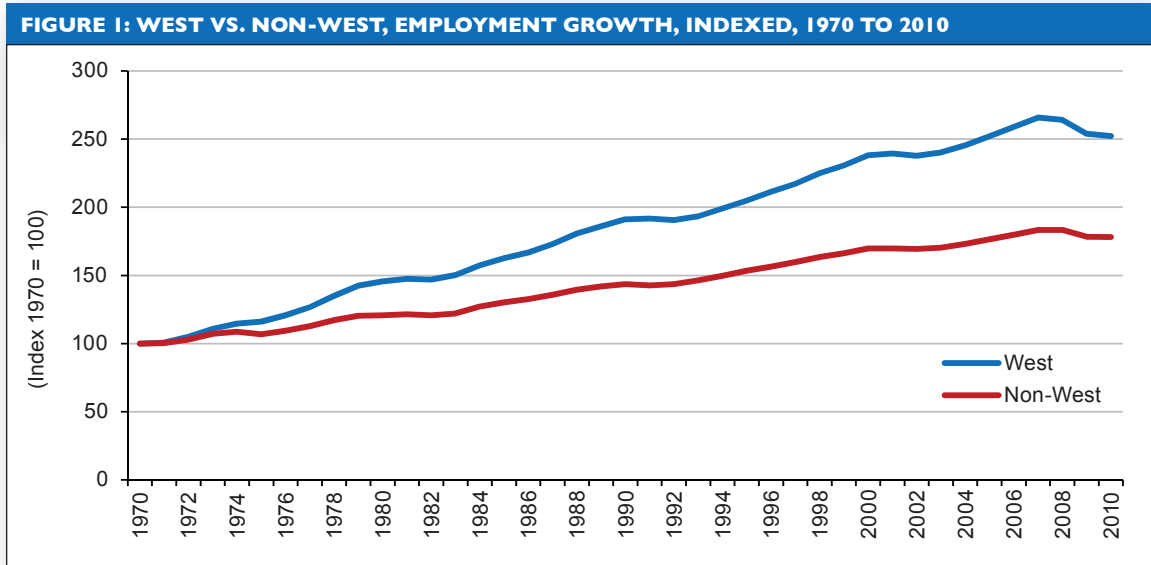
Not surprisingly, economists have found that western national parks, monuments, and other protected federal public lands support faster rates of job growth and are correlated with higher levels of per capita income.

This report reviews the West’s increasing economic diversity, the growth of the region’s modern services economy, and the economic role of public lands in the West. It examines the West as a whole, including large metropolitan areas where most economic activity takes place, as well as the non-metropolitan West where small to mid-sized communities also are successfully competing for businesses and talent, and creating new jobs by leveraging nearby public lands.

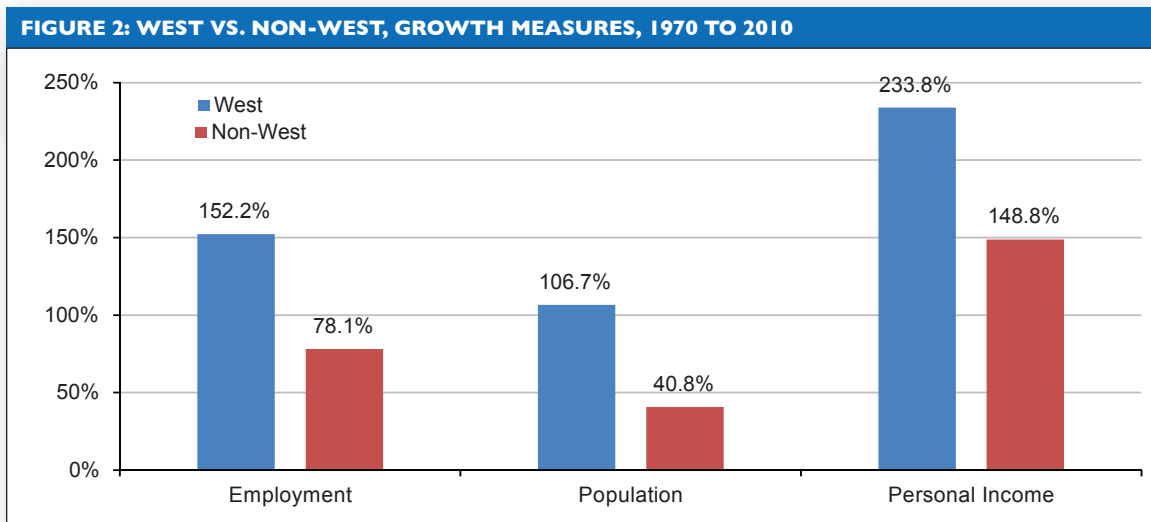
III. THE WEST OUTPACES THE REST OF THE U.S.

During the last four decades, the western economy outpaced the rest of nation. This can be seen in employment, where from 1970 to 2010 western jobs grew by 152 percent compared to 78 percent job growth for the rest of the country.²

We show data through 2010 because this is the latest year the U.S. Department of Commerce has reported economic data at the county level—see accompanying western state fact sheets for state-level data through 2011 here: <http://headwaterseconomics.org/land/west-is-best-value-of-public-lands>.



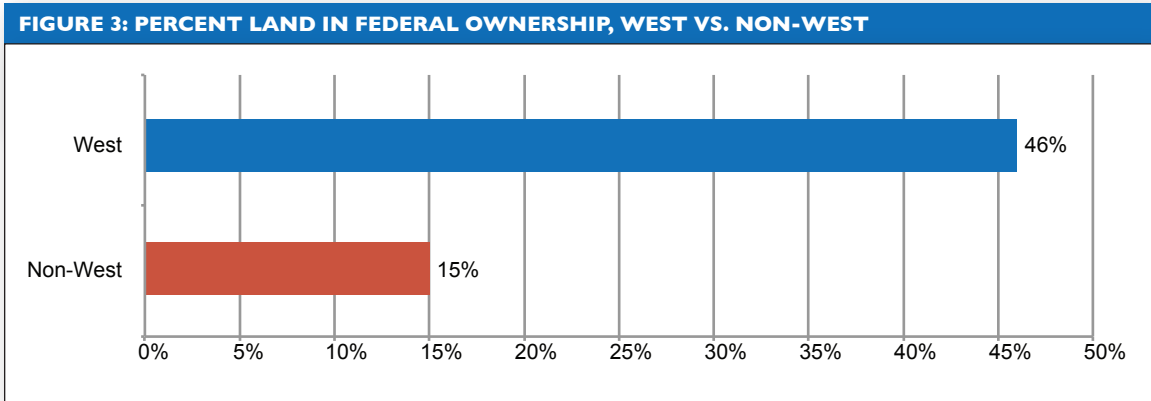
Population and personal income growth (adjusted for inflation) in the West also have outpaced the rest of the country. From 1970 to 2010, the West's population grew by 107 percent compared to 41 percent for the rest of the country, and real personal income in the West grew by 234 percent compared to 149 percent for the rest of the country.³



IV. PUBLIC LANDS ARE ABUNDANT IN THE WEST

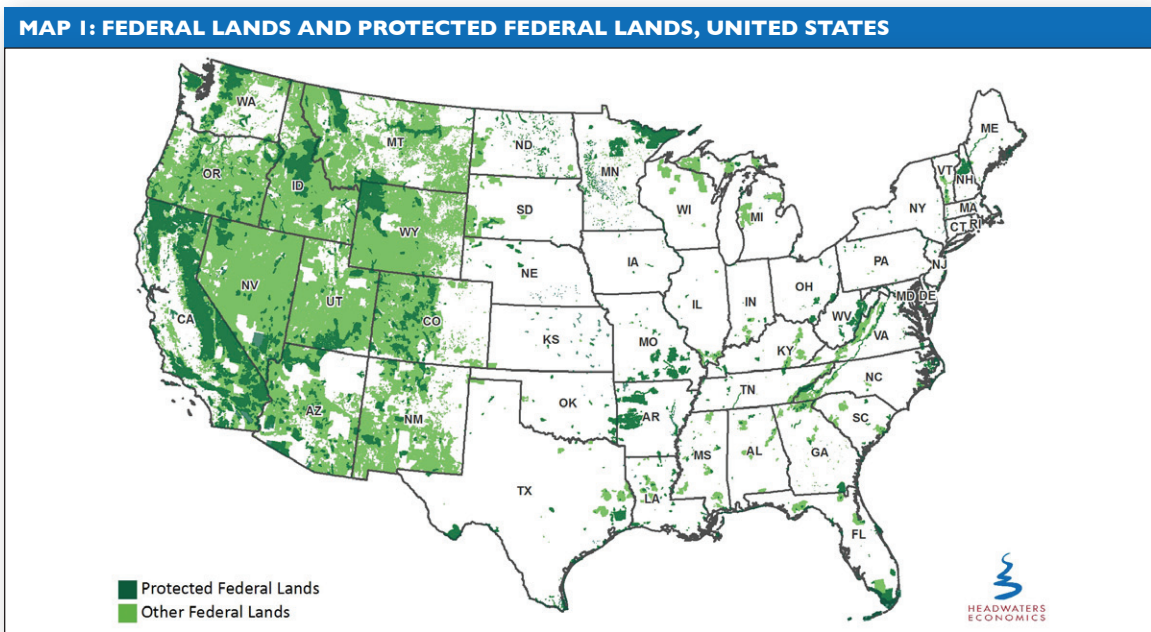
To begin to understand why the West is outperforming the rest of the country, it is important to recognize two major differences. First, the West has significantly more federal public lands. Second, the West has a population that is more concentrated in urban areas. The region is also characterized by an expansive geography that is more sparsely populated than other parts of the country.

Federal public lands are a defining feature of the West. The federal government manages 355 million acres in the West, or 46 percent of all land in the region. By contrast, the federal government manages 15 percent of all land in the rest of the country.⁴



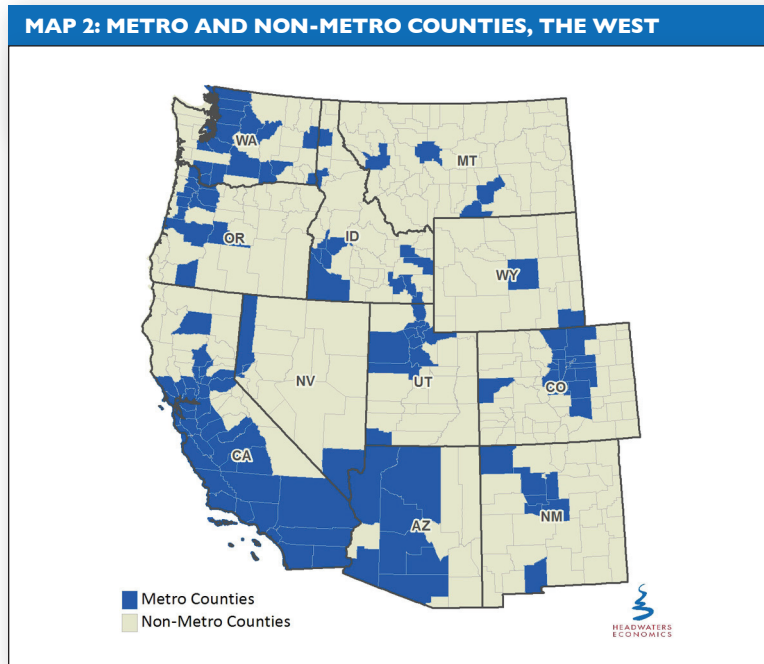
The map below shows federal public lands that are managed by the U.S. Forest Service, Bureau of Land Management, National Park Service, and U.S. Fish and Wildlife Service—which together constitute the large majority of federal lands in the West. They are managed for multiple-use objectives, such as resource extraction and recreation, and also for the protection of natural, cultural and historical resources.

Multiple-use public lands are shown in light green and protected public lands in dark green. Twenty-one percent of federal public lands in the West are permanently protected as national parks, national monuments, wilderness, national wildlife refuges, and other designations.⁵



The West's population and economy are located largely in metropolitan (metro) counties. Eighty-nine percent of the population and 90 percent of the jobs in the region are found in these counties. Yet the majority of the land base in the West is covered by non-metropolitan (non-metro) counties and is characterized by smaller communities and wide-open spaces.⁶

The map below shows western metro and non-metro counties. There are 128 metro counties (31% of total) and 286 non-metro counties (69% of total) in the West.



Public lands are important to both metro and non-metro western counties, though they are a larger share of the land base in the non-metro West. Thirty-nine percent of the land area in metro counties and 46 percent of the land in non-metro counties in the West are administered by the U.S. Forest Service, Bureau of Land Management, National Park Service, or U.S. Fish and Wildlife Service.

Historically, metro and non-metro counties had closely tied but distinct economic activities and roles.⁷ As we will see below, a growing number of non-metro counties are now successfully competing for higher-paying jobs in growing industries—in part by leveraging the presence of public lands to attract companies and talent—that have traditionally been found only in metro economies.

V. THE WEST'S RISE IS DRIVEN BY EXPANDING SERVICES INDUSTRIES

The meteoric rise of the West in recent decades is largely explained by the region's success in developing and attracting a diverse services economy. Services encompass an array of sectors ranging from low-wage industries such as accommodation and food services to high-wage industries such as professional and technical services, including architects, engineers, and computer programmers.⁸

Sitel, Las Cruces, NM

We operate a contact center in Las Cruces, New Mexico. Sitel originally decided to open the operation here because of a favorable labor market and strong educational institutions as well as easy access to a major airport.

Our initial team found the location extremely attractive. Let's face it, Las Cruces is the jewel of the southwest—this attractive city is surrounded by accessible public lands and has incredible views of the mountains and high desert.

Because of the nature of our work, we are indoors and plugged into technology most of every working day. So the ability to disconnect and get outdoors before and after work is crucial to everyone's sense of well being.

The outdoor amenities and quality of life here are a big part of what keeps us productive and how employees relate to each other—it's often what we talk about in break areas and over lunch or before meetings. I am proud of the work-life balance we can offer in southern New Mexico.

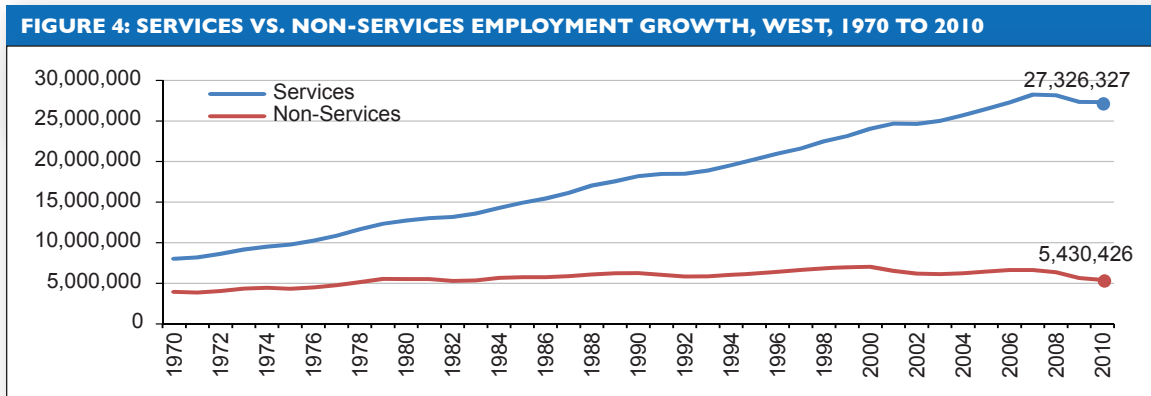
Initially, we hired people from outside the area to fill positions. Now we mainly hire regionally and have seen many advance their careers through the ranks. We are not just providing jobs; we are offering life-changing careers with advanced placement opportunities.

—John Munoz, Director

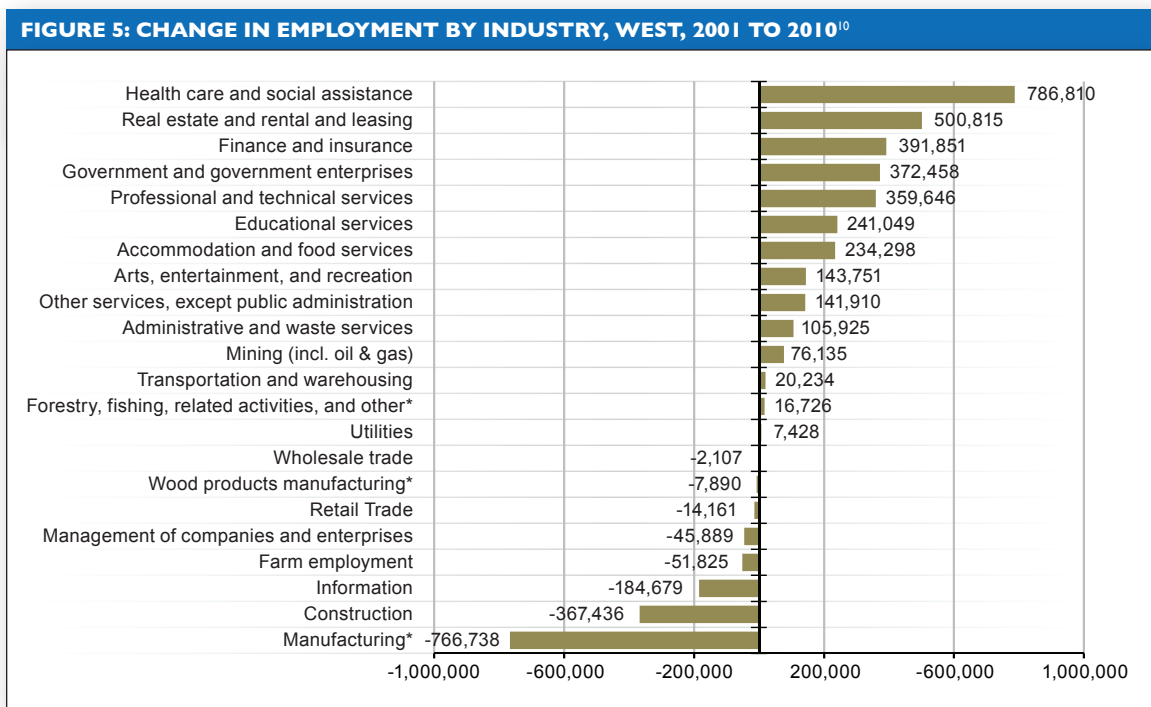
We first examine the growth of services sectors in the West as a whole, which from an economic standpoint is dominated by large metro areas, followed by a look at the non-metro West. Both regions have undergone significant transformations toward a services economy in recent decades.

The West as a Whole

As the line graph below shows, across the West services sectors created 19.3 million net new jobs, or almost 100 percent of net new jobs in the West, during the last four decades. Non-services sectors as a whole are holding steady from an employment standpoint as the broader economy expands.⁹



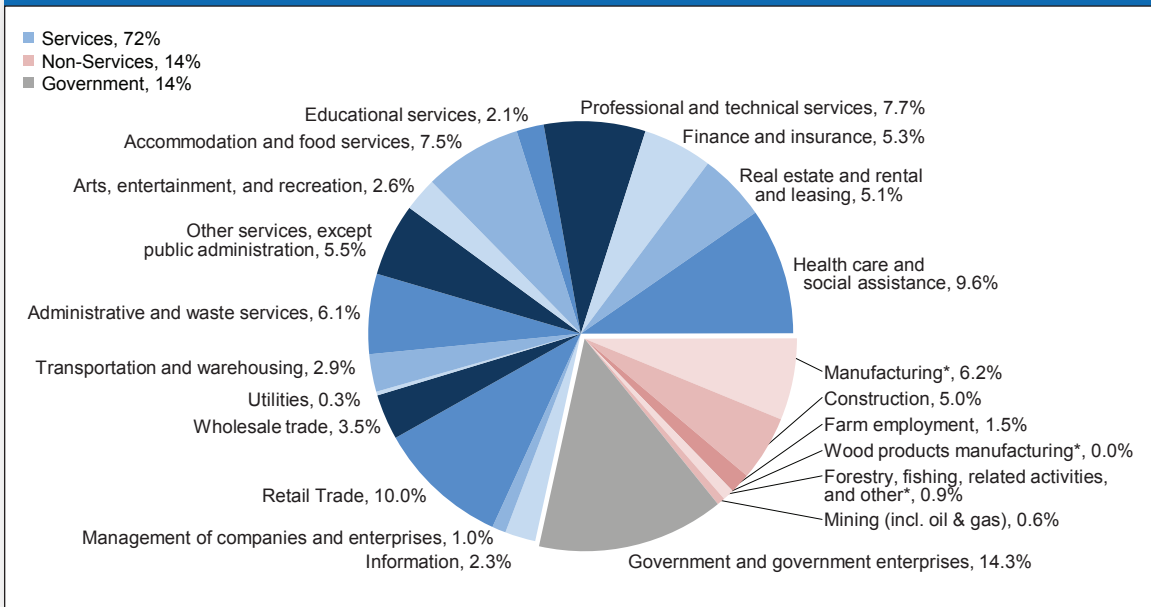
To better understand services sectors, the figures below show recent growth and share of total employment at a more detailed industry level.



In the West, the top job creators in the last decade were all services sectors, many of them relatively high-paying: health care (+786,810 jobs), real estate (+500,815 jobs), and finance and insurance (+391,851 jobs). By contrast, non-services industries such as manufacturing (-407,192 jobs) and construction (-367,436 jobs) were the leading source of job losses in the West during the last decade.

In 2010, services sectors as a whole accounted for 72 percent and non-services for 14 percent of total employment in the West. Government jobs also are important in the region and made up 14 percent of total employment in the same year.¹¹

FIGURE 6: EMPLOYMENT BY INDUSTRY PERCENT OF TOTAL, WEST, 2010

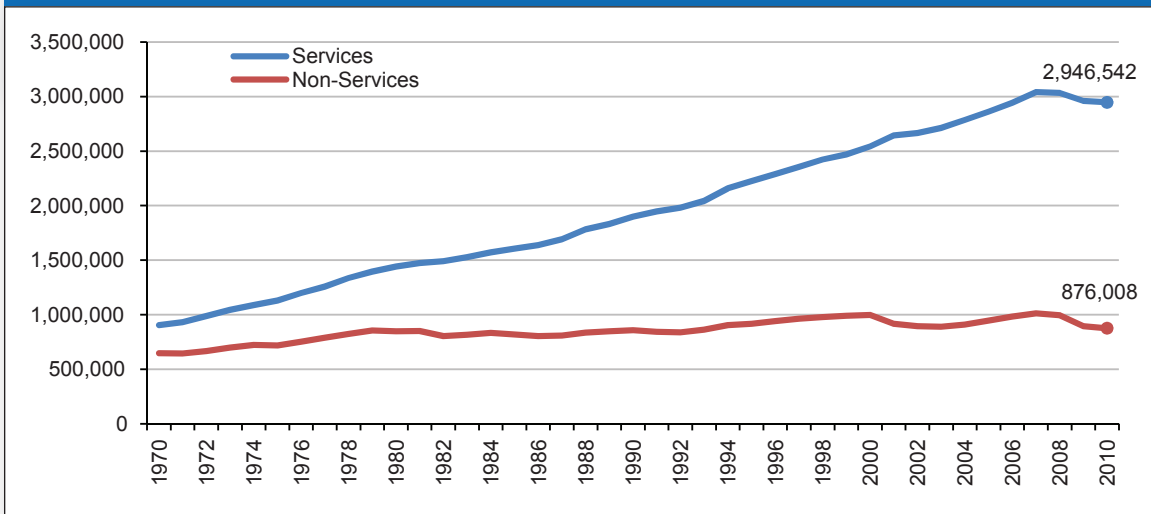


Non-Metro West

While the economies of non-metro areas in the West are smaller in scale and often face challenges related to sector diversity and access to larger markets, here too services sectors lead growth.

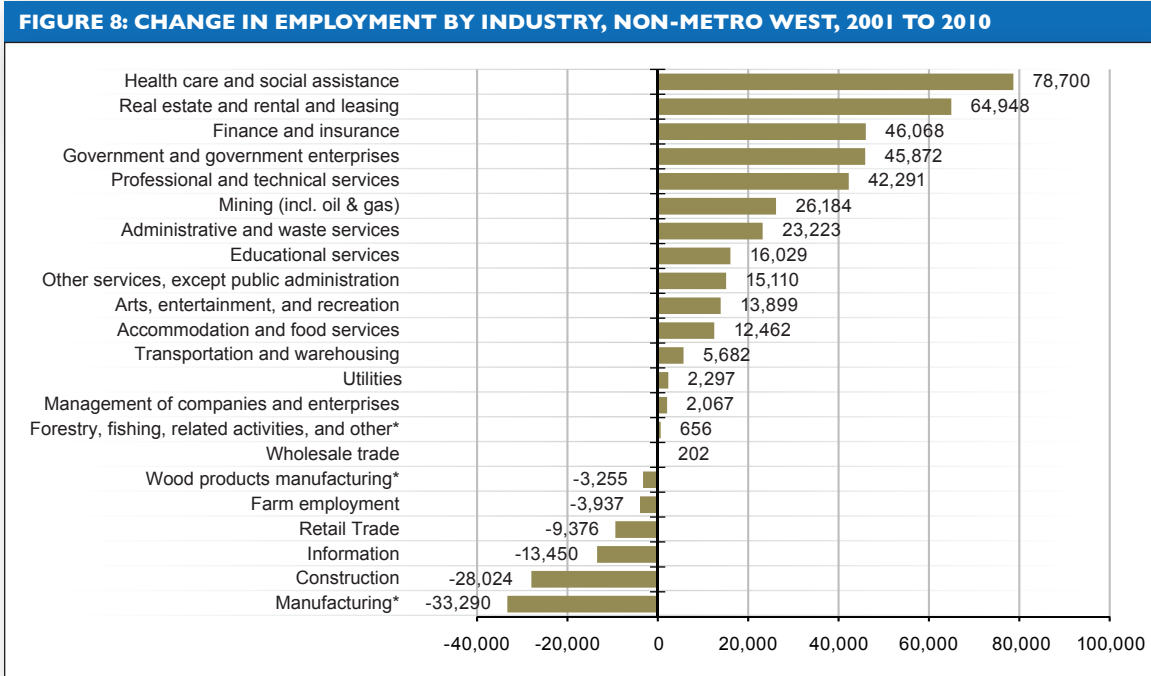
From 1970 to 2010, services sectors created more than two million net new jobs, or nearly 100 percent of net new job growth in the non-metro West. Non-services have been roughly flat over this same period.¹²

FIGURE 7: SERVICES VS. NON-SERVICES EMPLOYMENT GROWTH, NON-METRO WEST, 1970 TO 2010

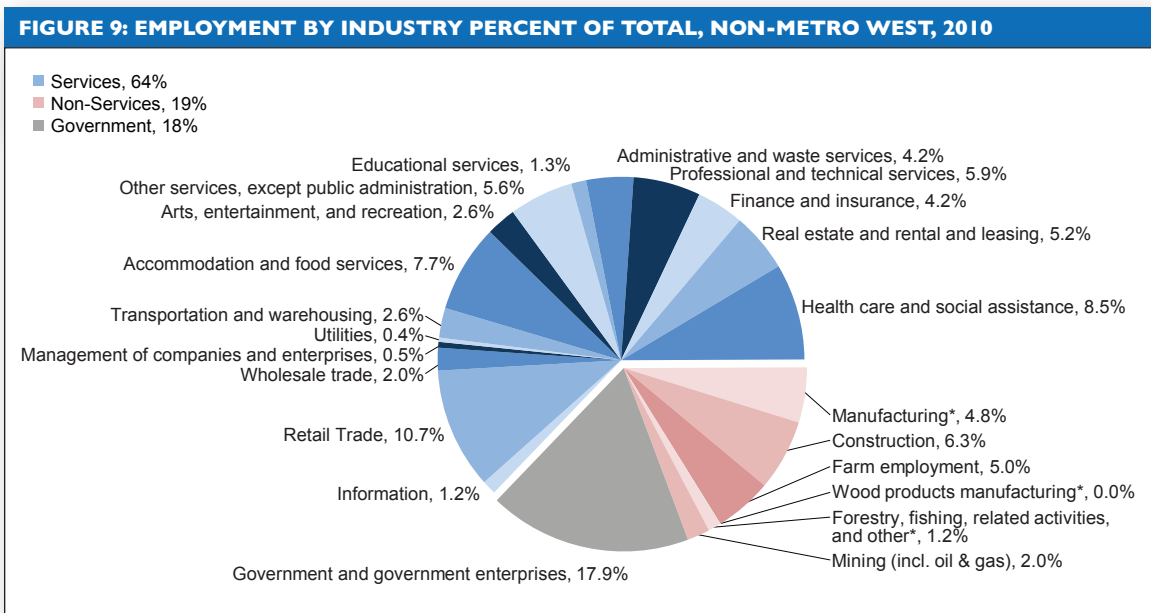


During the last decade, the leading job creators in the non-metro West were all services sectors, many of them higher-paying. In fact, they are the same industries posting top job gains in the West as a whole. Health care added 78,700 new jobs, real estate 64,948 new jobs, and finance and insurance 46,068 new jobs from 2001 to 2010.

By contrast, non-services industries such as manufacturing (-32,607 jobs) and construction (-28,025 jobs) were the leading source of job losses in the non-metro West in the last decade.



In 2010, services sectors as a whole accounted for 64 percent and non-services for 19 percent of total employment in the non-metro West. Government jobs also are important in the region and made up 18 percent of total employment in the same year.¹³



VI. SERVICES INDUSTRIES PREDOMINATE IN MOST WESTERN COUNTIES

As the previous pages show, services employment is driving job growth and is now the dominant form of economic activity in the West, including the non-metro West.

Not surprisingly, services sectors are widespread across western communities and higher-paying services are a key ingredient of many local economies.

FIGURE 10: NUMBER AND SHARE OF WESTERN COUNTIES RELIANT ON SERVICES AND HIGH WAGE SERVICES SECTORS, 2010¹⁴

	Threshold	# of Counties	% Western Counties
Services	≥ 70% Total Private Jobs	203	49%
High-Wage Services	≥ 15% Total Private Jobs	165	40%

In 2010, services sectors were 70+ percent of total private employment in 203 of 414 western counties, or 49 percent of total. These services-reliant economies are evenly distributed between metro and non-metro counties, though they are represented in a greater share of metro counties. In 2010, 101 metro counties (79% of total metro) and 102 non-metro counties (36% of total non-metro) were significantly reliant on services sectors.

High-wage services sectors are of particular interest to communities seeking economic growth because they indicate greater success developing and attracting the higher-skill aspects of the broader services economy.

Roambi, Solana Beach, CA

We work in a very competitive industry – software development for mobile platforms. You have to be creative to succeed here. You have to be a company where talented people want to work to succeed.

We actively leverage our location and the outdoors to attract and retain our employees. Our engineers love the outdoors and water sports in particular. A lot of them are athletes –about 85 percent. They bring their passion for sports and competition to their work. They are also risk takers and this is a core part of our entrepreneurial culture.

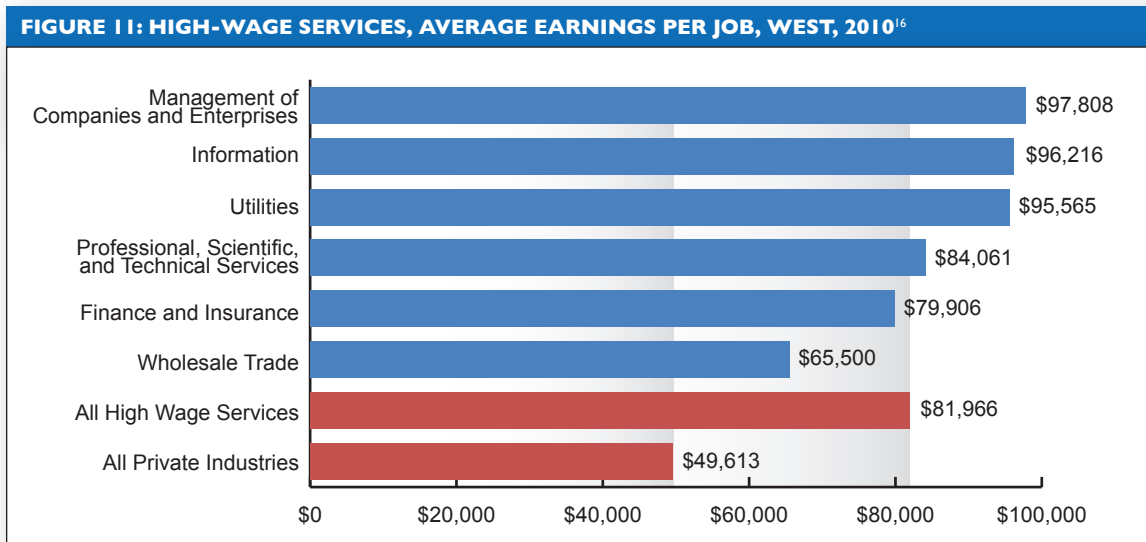
For our employees, taking time to get outdoors is re-energizing. It builds passion and commitment, and is critical to creativity and innovation—this is where the best work happens. It's also a competitive edge for us since not all companies work this way.

We try to integrate quality of life with the quality of work at our company. We have created a culture where our employees can pursue their passions. This leads to more successful teamwork and a more successful company.

As a result of the type of company we are, we have experienced very minimal turnover in our development team in the last 5 years. This is unusual in our industry, and a great benefit because turnover is expensive and hurts productivity.

—Santiago Becerra, CEO

Six services sectors pay on average better than overall earnings per job for all private industries in the West. They are: information; finance and insurance; management of companies and enterprises; professional, scientific, and technical services; wholesale trade; and utilities. Other broad sectors, such as health care and social assistance, are not considered here because they mix higher- and lower-paying occupations.¹⁵



In 2010, average earnings per job in the West for high-wage services as a group were \$81,966, compared to \$49,613 for all private industries.

In 2010, high-wage services jobs accounted for 15+ percent of total private employment in 165 of 414 western counties, or 40 percent of all western counties. High-wage services are more important to metro than non-metro counties. In 2010, 88 metro counties (69% of total metro) and 77 non-metro counties (27% of total non-metro) were reliant on high-wage services at this level.¹⁷

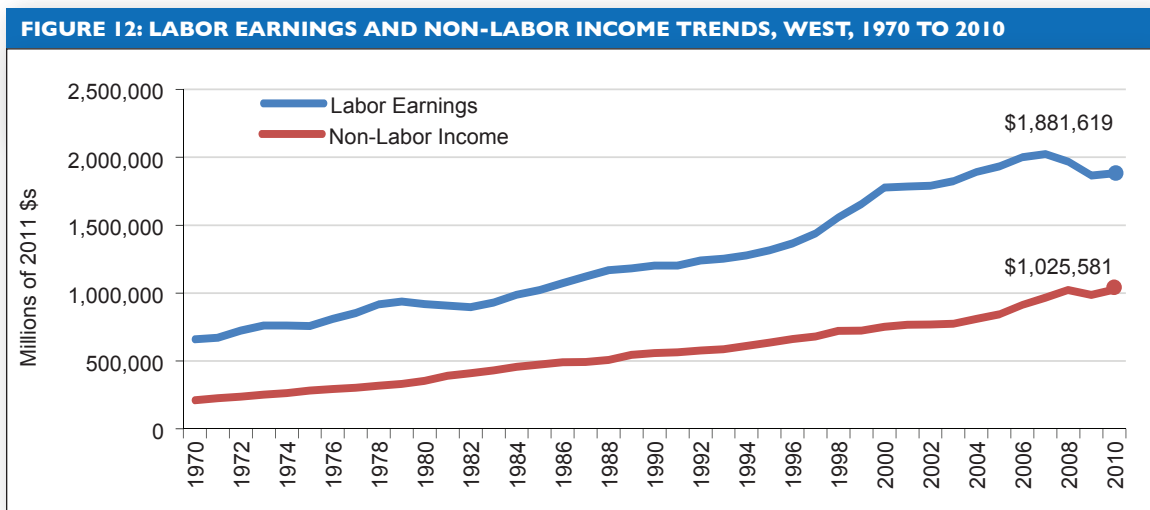
VII. NON-LABOR INCOME IS A MAJOR DRIVER OF GROWTH

While services have come to define the economy of most western communities, an equally significant factor in local western economies is non-labor income.

Non-labor income consists of dividends, interest, rent (money earned from investments) and government transfer payments to individuals (Social Security, Medicare, etc.).¹⁸

Both investment income and transfer payments have a significant age-related aspect, and much of their growth and significance is tied to the aging of the U.S. population, accumulated wealth, and entitlements. Only a small portion of transfer payments (6% in the West) covers things like Income Maintenance Benefits (“welfare”).¹⁹

From 1970 to 2010, non-labor income in the West grew from \$211 billion to \$1 trillion, in real terms, a 385 percent increase. This represents the fastest growing source of new personal income and 35 cents of every dollar of personal income in the West in 2010.²⁰



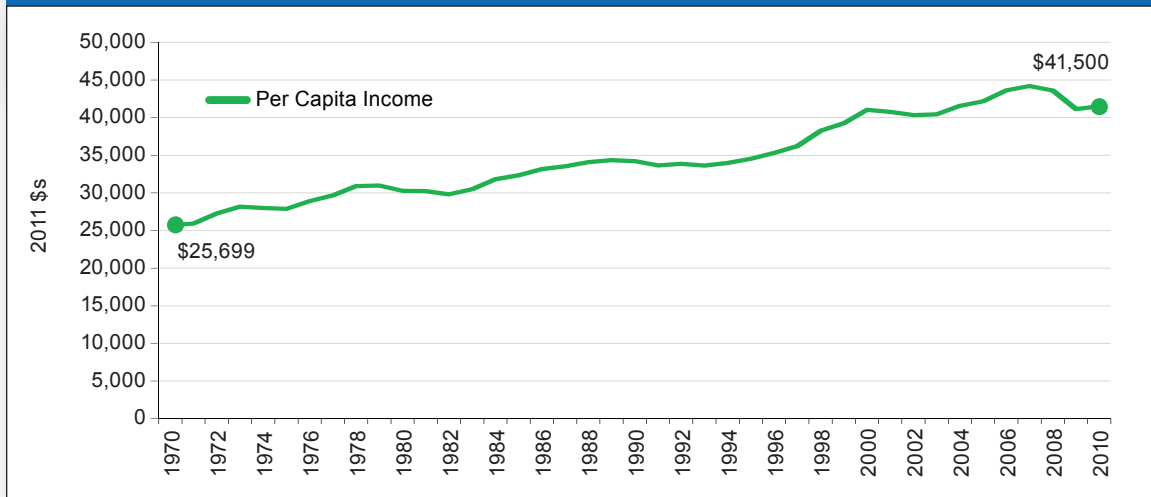
Non-labor income is both significant and widely distributed across the West. All 414 western counties derive 15+ percent of their total personal income from non-labor income sources. Even using a higher threshold of 30+ percent, 382 western counties, or 92 percent of total, relied significantly on non-labor income in 2010.

FIGURE 13: NUMBER AND SHARE OF WESTERN COUNTIES RELIANT ON NON-LABOR INCOME, 2010²¹

	Threshold	# of Counties	% Western Counties
Non-Labor Income	≥ 15% Total Personal Income	414	100%
Non-Labor Income	≥ 30% Total Personal Income	382	92%

Metro and non-metro western counties both depend significantly on non-labor income. In 2010, 113 metro counties (88% of total metro) and 269 non-metro counties (94% of total non-metro) derived 30+ percent of total personal income from non-labor income sources.

FIGURE 14: PER CAPITA INCOME TRENDS, WEST, 1970 TO 2010

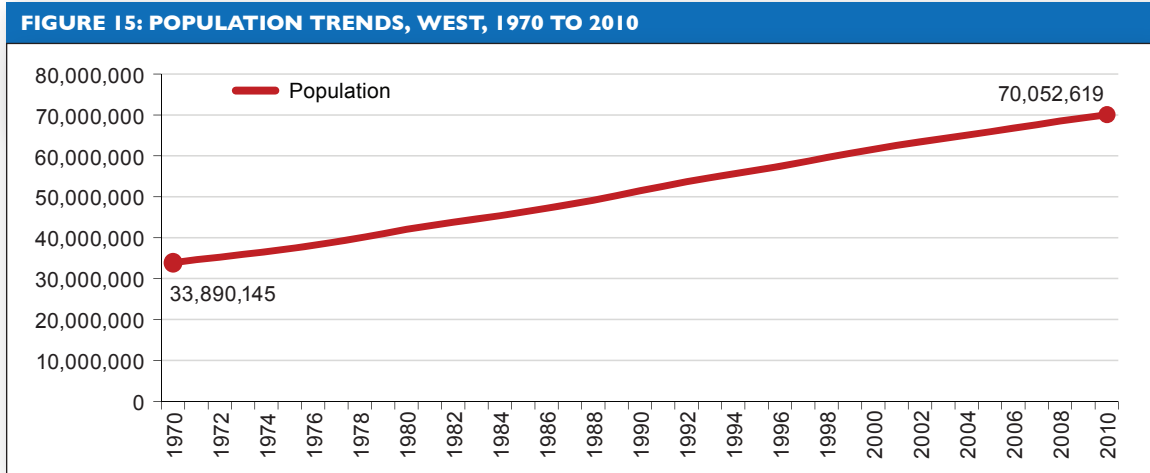


Non-labor income is doubly important: as a source of personal income that is spent in local communities across the West, and because it boosts per capita income, a widely recognized measure of economic well-being. In addition to higher-paying jobs, non-labor income contributed to raising per capita income in the West, in real terms, from \$25,699 in 1970 to \$41,500 in 2010, a 61 percent increase, enhancing wealth significantly in the region.²²

VIII. THE WEST IS GROWING AND ATTRACTING NEW RESIDENTS

The ability to attract new people is essential to the vibrancy and long-term health of the West’s economy. It is even more important today as companies and individuals are freer to choose where they will locate, and competition is fierce for talented workers who are fueling some the region’s fastest growing industries.

The West has the fastest-growing population of any region in the country. An expanding population and the ability to draw people are measures of the West’s attractiveness.



During the last four decades the West added 36 million people, more than doubling its population. In 2010, the region’s population was more than 70 million people.²³

Net migration has been an important part of the West’s ability to grow. From 2000 to 2010, the West as a whole attracted on average more than 324,000 net new people per year, contributing 39 percent of all regional population growth.²⁴ In-migration is even more important to the non-metro West, where 49 percent of all population growth resulted from net in-migration during the same time period.

FIGURE 16: NUMBER AND SHARE OF WESTERN COUNTIES RELIANT ON IN-MIGRATION, 2000 TO 2010²⁵

	Threshold	# of Counties	% Western Counties
Net In-Migration	≥ 30% Net Population Growth	208	50%
Net In-Migration	≥ 50% Net Population Growth	161	39%

Overall, in-migration accounted for 30+ percent of all net new population growth in the last decade in 208 of 414 western counties, or 50 percent of total. During the same time period, in-migration accounted for 50+ percent of all net new population growth in 161 of 414 western counties, or 39 percent of total.

“Fully 87 percent of American voters agree that their ‘state and national parks, forests, monuments, and wildlife areas are an essential part of [their] state’s quality of life.’ A near-unanimous 96 percent of those we polled in six inner West states likewise agreed. ... Seven in ten Americans and nine in ten Westerners agree that these public lands are ‘an essential part’ of their state’s economy.”²⁶

—Pollsters David Metz and Lori Weigel

IX. A NEW COMPETITIVE ADVANTAGE IN THE WEST

The economy of the West, like that of the U.S. and other industrialized economies, has shifted over time from a primary reliance on the extraction and processing of raw materials to the deployment of human skills, technology, and innovation.

In today's economy, the West's largest economic drivers are not directly tied to wood, gold, cattle, or other basic commodities, but rather stem from the growing value-added contributions of knowledge-based sectors across the region.

“Over the past century, the United States has shifted from an economy centered on producing physical goods to one centered on innovation and technology.”

“In the twentieth century, competition was about accumulating physical capital. Today it is about attracting the best human capital.”²⁷

—Enrico Moretti, The New Geography of Jobs

Many of the West's growing industries, such as entertainment, financial services, biotechnology, engineering, and software development, use few if any raw materials. The real economic value—and what is required to be competitive—lies in the knowledge-based occupations that demand specialized training and education.

In the transition from a primarily natural resource-based economy to a knowledge-based economy, the key to being competitive is the ability to cultivate and attract the most educated and talented workforce, and the businesses that employ them. Communities across the West have realized that they can do this by marketing the outdoor quality of life provided by public lands.

Waldron & Co., Seattle, WA

I help enterprises recruit talent to fill key senior level leadership positions.

Increasingly over the years, amenities have become more a part of the discussion with our clients and more important to candidates' decisions about taking a job. It's not just what the job is any longer, but where the job is that matters.

Outdoor recreation is a common topic of conversation in our recruitment efforts. In the West, people make the most of the outdoors—they love to get outside and recreate. It's part of the culture here.

When I ask what the selling points are for a position, ninety percent of the time clients talk about the location. People live in the West because they want to live here. And they expect those they work with will feel the same way.

—Ed Rogan, Vice President

X. BUSINESS LOCATION DECISIONS ARE TIED TO QUALITY OF LIFE

What do communities need to attract the best and the brightest? They require good schools and transportation infrastructure, and high-speed Internet. Increasingly, they also need a high quality of life, with clean air and water, ample recreation opportunities, scenic vistas, and other amenities that draw entrepreneurs and a skilled workforce.

This is precisely where the West excels. The region's wide-open spaces, mountains, canyons, and other spectacular natural features set the West apart from the rest of the country. Because significant portions of these lands are public, and protected as national parks and monuments for example, they are accessible and enjoyed by the West's residents at higher rates than in the rest of the country.²⁸

DaVita, Inc., Denver, CO

DaVita is a large and growing health care company. We recently moved to Denver, Colorado, and access to a high-quality outdoors experience was an important part of our decision.

There are several powerful advantages to locating our headquarters in a community with high quality access to the outdoors.

First, a lot of our best people care about the outdoors and so it was just common sense to put people in a place like Denver that provides such easy access to the outdoors.

Second, when it comes to recruiting new teammates, we've found that the type of people who care about the outdoors are generally the ones who will help you create a healthier and more productive culture at work.

And third, we believe that places that care about preserving the outdoors tend to be more community-minded. Quality of land conservation in urban and suburban environments, and in the open West, correlate almost perfectly to having the populations, electorates, and elected officials that make other healthy long-term decisions that focus on overall quality of life.

When we fly people to Denver for an interview, the fact that we can so easily get them up in mountains, take them out on trails and rivers, and show them beautiful outdoor vistas makes it so much easier for us to get them interested in moving here compared to someplace without access to the outdoors.

We also do a number of things directly with the outdoors to help our people become a part of our team. For example, we send teams of employees through our DaVita Outdoor Program right here in Colorado's Rocky Mountains. These outings have become an important way for us to enjoy ourselves, test our limits, and reflect on leadership and DaVita values. They change lives and improve our company's performance.

For DaVita, the outdoors is an unambiguous and fundamental competitive advantage. The kind of people with a passion for the outdoors are likely to succeed at our company, and our company is likely to succeed when staffed by people with a passion for the outdoors. Another big pick up for us: we are able to hire a lot of talented individuals that other companies want.

—Kent Thiry, CEO

A high-quality outdoor environment along with a culture of innovation gives the West a unique competitive advantage that helps explain why the region's economy is the fastest-growing in the country. As the structure of the U.S. economy and new growth opportunities have shifted to knowledge-based occupations and industries, the factors that determine the location of companies are shifting.

Traditional location factors are relatively less important to firms in knowledge-based enterprises. Thanks to advances in transportation and communication, these companies now have far fewer constraints on where they conduct business. As “footloose” businesses, whose success is relatively independent of location, such companies are less focused on traditional cost factors and more sensitive to the preferences of CEOs and recruitment and retention factors such as access to outdoor recreation and natural landscapes.²⁹

Quality of life variables are shifting from “would like” to “must have” location factors. A growing body of research developed over the last 30 years has documented this shift. According to a recent survey, “Quality of life consistently ranks near the top of locational criteria for high-technology, R&D labs and other facilities that are more footloose in relation to traditional cost-sensitive location factors and place a greater emphasis on attracting and retaining skilled labor.”³⁰

For footloose firms, quality of life factors, ranging from civic pride and public health to the environment and recreation, are more important because these amenities attract businesses, and also make the recruitment and retention of employees easier and more cost effective.³¹ For industries where skilled labor is in high demand, quality of life factors can make the difference between hiring, or failing to hire, new workers.³²

TicketPrinting.com, Bozeman, MT

TicketPrinting.com started in Big Fork, Montana and then moved to Bozeman because it's an incredible place to live and also to tap into the talent coming out of Montana State University.

Our company and others are part of an emerging technology cluster that's thriving, despite our remoteness and small population base, because of the great place this is to live and work.

All of us at TicketPrinting.com are passionate about the outdoors, whether it's fishing, hunting, hiking, or some other activity. We have a strong outdoor ethic, which has become a part of our company culture.

Our quality of life is defined by our public lands and access to them. This gives us and other tech companies in Montana a distinct competitive advantage. We can recruit and retain top talent successfully within and outside the state because of the world-class landscape that surrounds us. And we benefit from a staff that is passionate about where they live and what they do.

I have had customers call just to tell me that my employees are genuinely nice and want to help—that is because of where we live and work, and the kind of culture we have been able to foster here in Montana. In this sense, quality of life makes for a better company.

—Lance Trebesch, CEO

While quality of life factors have grown in importance, many of today’s innovative firms also prefer locations that are close to markets, suppliers, competitors, collaborators, and a skilled workforce—what is now often referred to as an attractive business “cluster.”³³

Smaller cities and rural areas that lack scale and depth in specialized areas can still compete for more innovative and growing business sectors, though they may face additional challenges attracting and retaining larger companies. There is evidence that the combination of outdoor amenities, a talented pool of workers, and an entrepreneurial context are stimulating significant economic growth in non-metro areas.³⁴

Researchers also have pointed out that public lands in the West, along with rivers, lakes, mountains, and plentiful recreational opportunities, serve as attractants to both business owners and retirees.³⁵ A recent review of the amenity migration research from around the world noted, “the American West is perhaps the most often-cited example of a region experiencing high rates of population growth related to amenity migration.”³⁶

XI. PROTECTED PUBLIC LANDS ARE AN ECONOMIC ADVANTAGE

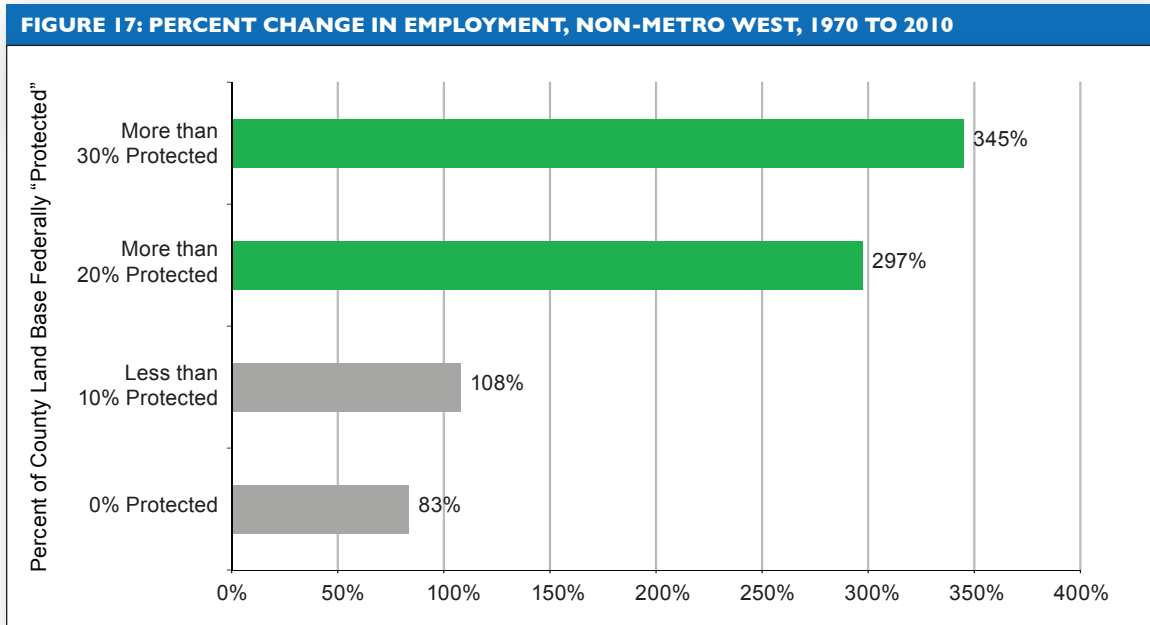
A large and growing body of research has analyzed the economic role of federal public lands and more specifically the economic role of protected federal public lands. The research shows that communities and counties with protected federal public lands generally outperform those without public lands in economic performance measures.³⁷

In 2011, more than 100 U.S. economists and related academics—including three Nobel Laureates—signed a letter urging the President to “create jobs and support businesses by investing in our public lands infrastructure and establishing new protected areas such as parks, wilderness, and monuments.” The letter states that federal protected public lands are essential to the West’s economic future, attracting innovative companies and workers, and contributing a vital component of the region’s competitive advantage.³⁸

—Economist Letter on Value of Public Lands

Recent research by Headwaters Economics found that for the non-metro West there are important employment and personal income benefits associated with the presence in a county of protected federal public lands.

From 1970 to 2010, western non-metro counties with more than 30 percent of the county’s land base in federal protected status increased jobs by 345 percent. As the share of federal lands in protected status goes down, the rate of job growth declines as well. Non-metro counties with no protected federal land increased jobs by 83 percent.³⁹



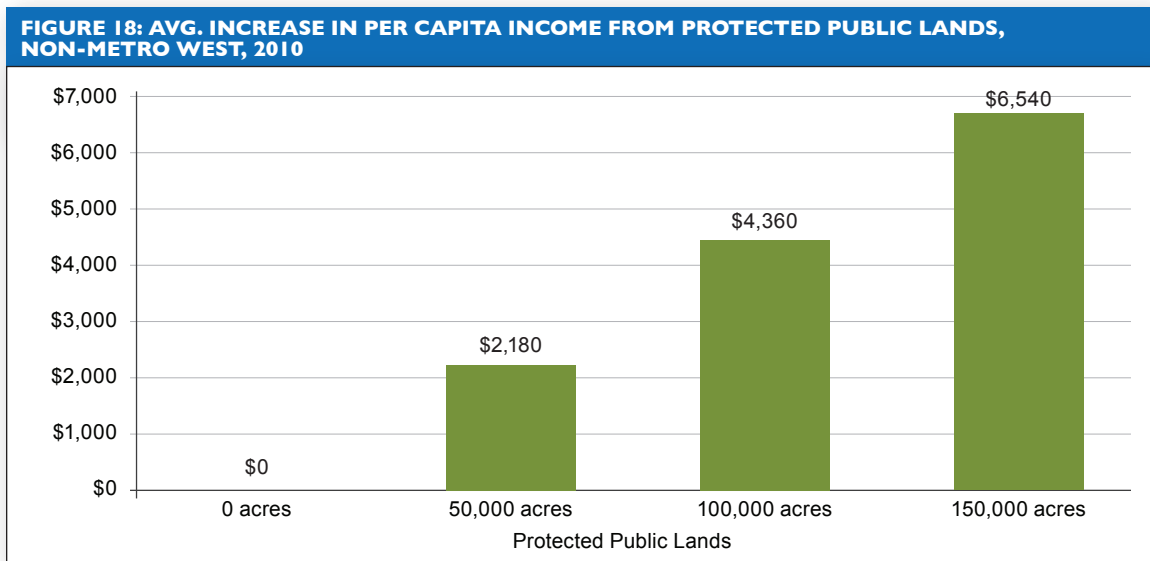
“Small business owners believe protecting public lands would positively impact small business opportunities, local job growth, state economies and more: 65 percent of owners believe designating new national parks and monuments would enhance local jobs and the economy... and 52 percent agree it would help their state attract and retain new business and entrepreneurs.”⁴⁰

—Small Business Majority Poll Conducted in Arizona, Colorado, Nevada, and New Mexico

There is also evidence that people are better off economically when they live near protected public lands. In addition to employment benefits, there are personal income rewards—in particular higher per capita income.

Looking at the West’s 286 non-metro-counties, a statistical analysis found a meaningful relationship between the amount of protected public land and higher per capita income levels in 2010.⁴¹

The effect protected federal lands have on per capita income can be most easily described in this way: on average, western non-metro counties have a per capita income that is \$436 higher for every 10,000 acres of protected federal lands within their boundaries.



The chart above shows four scenarios, ranging from 0 to 150,000 acres of protected public lands in non-metro western counties. The increase in per capita income explained by protected public lands ranges from \$2,180 to \$6,540. For example, a non-metro western county with 100,000 acres of protected public lands will have on average a per capita income that is \$4,360 higher than a county with no protected public lands. To put this premium in perspective, the average per capita income for all non-metro western counties was \$34,870 in 2010.⁴²

Our research and that of others clearly show that protected public lands are a competitive economic advantage in the West, supporting faster rates of job growth and higher levels of per capita income. These benefits should increase as the region, including non-metro counties, continues to shift toward a knowledge-based economy. This raises the important question of what federal, state, and private policies and investments will maximize the value of protected public lands for western businesses and communities.

XII. REFERENCES

- 1 National Chamber Foundation, Executive Summary, <http://ncf.uschamber.com/library/enterprising-states>.
- 2 U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA30.
- 3 Ibid.
- 4 AZ Land Resources Information System, 2009; MT Natural Heritage Program, 2008; Conservation Biology Institute, 2008 (for CA); Conservation Biology Institute, 2006 (for remaining states).
- 5 Protected Federal Lands: We adopted the definition of “protected public lands” from: Rasker, R., P.H. Gude, J.A. Gude, and J. van den Noort. 2009. The economic importance of air travel in high-amenity rural areas. *Journal of Rural Studies* 25: 343–353. Here specific federal land designations of the National Park Service (NPS), the Forest Service (FS), the Bureau of Land Management (BLM), or the Fish and Wildlife Service (FWS) were considered protected. These designations are: National Parks and Preserves (NPS), Wilderness (NPS, FWS, FS, BLM), National Conservation Areas (BLM), National Monuments (NPS, FS, BLM), National Recreation Areas (NPS, FS, BLM), National Wild and Scenic Rivers (NPS, FS, BLM), Waterfowl Production Areas (FWS), Wildlife Management Areas (FWS), Research Natural Areas (FS, BLM), Areas of Critical Environmental Concern (BLM), and National Wildlife Refuges (FWS). Lands administered by other federal agencies (including the Army Corps of Engineers, Bureau of Reclamation, other Department of Agriculture, Department of Defense, Department of Energy, and Department of Transportation) were not included, nor were state, local, or private lands. This definition of protected public lands attempts to include areas that have a higher level of managerial and commercial use restrictions than other federal lands and a less changeable status than other designations (for example, Wilderness Study Areas and Inventoried Roadless Areas).
Other Federal Lands: NPS, FS, BLM, FWS lands with designations other than those listed above.
- 6 Office of Management and Budget. 2009. Update of Statistical Area Definitions and Guidance on Their Uses (OMB Bulletin No. 10-02). Washington, D.C. OMB defines metropolitan counties as having at least one urbanized area of 50,000 or more in population. Non-metropolitan counties are all other counties.
- 7 See, for example, Cronon, William. *Nature’s metropolis: Chicago and the Great West*. WW Norton & Company, 1992.
- 8 For details on services industries, see North American Industry Classification System (NAICS) definitions, available here: <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2007>.
- 9 U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA25 and CA25N.
- 10 Some industry categories have been modified from the original source to better illustrate employment in sub-sectors that are important to the western economy. The asterisks in these charts indicate the following. Wood Products Manufacturing is a sub-set of total Manufacturing and consists of the wood product (NAICS 511) and paper (NAICS 537) manufacturing sectors. The Bureau of Economic Analysis does not report employment at this NAICS level (i.e., the 3-digit level), but does provide personal income at this level. To estimate employment for these sectors at the 3-digit level, we calculated a ratio consisting of personal income earned in these sectors divided by personal income earned in all manufacturing. We multiplied this ratio by total manufacturing employment to estimate the number of jobs in wood products and paper manufacturing. Manufacturing consists of total manufacturing minus Woods Products Manufacturing. Forestry is part of Forestry, Fishing, Related Activities, and Other and consists of the non-manufacturing components of the timber industry, such as growing and harvesting.
- 11 U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA25N.
- 12 U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA25 and CA25N.
- 13 U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA25N. Because this employment aggregation consists of county-level data, some underlying values at the industry level have been withheld by the U.S. Department of Commerce in accordance with federal data reporting guidelines and totals do not add to 100%.
- 14 U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA25N.
- 15 The 2-digit NAICS codes for high-wage services used in this report are: Information (51); Finance and Insurance (52); Management of Companies and Enterprises (55); Professional, Scientific, and Technical Services (54); Wholesale Trade (42); and Utilities (22).
- 16 See previous reference for NAICS codes. Average wage data are from: U.S. Department of Labor. 2012. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Washington, D.C.
- 17 U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA25N.
- 18 For details on dividends, interest, rent, see: <http://www.bea.gov/regional/definitions/nextpage.cfm?key=Dividends,%20interest,%20and%20rent>; for details on transfer payments, see: <http://www.bea.gov/regional/definitions/nextpage.cfm?key=Personal%20current%20transfer%20receipts>.
- 19 U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Tables CA35.
- 20 U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA30.
- 21 Ibid.
- 22 Ibid.
- 23 Ibid.
- 24 The difference between in-migration to an area and out-migration from the same area.
- 25 U.S. Department of Commerce. 2012. Census Bureau, Population Division, Washington, D.C.
- 26 David Metz (Fairbank, Maslin, Maullin, Metz & Associates) and Lori Weigel (Public Opinion Strategies), Government does a good job of protecting our natural history, 2012, available at: <http://thehill.com/blogs/congress-blog/energy-a-environment/259763-government-does-a-good-job-of-protecting-our-natural-history>
- 27 Moretti, Enrico. *The New Geography of Jobs*. Houghton Mifflin Harcourt, 2012. Pp. 10, 66.
- 28 See, for example, Outdoor Foundation, *Outdoor Recreation Participation Report 2012*, available at: http://www.outdoorindustry.org/images/researchfiles/OIA_OutdoorRecreationParticipationReport2012.pdf?170.
- 29 Gottlieb, P. (1994). “Amenities as Economic Development Tools: Is There Enough Evidence?” *Economic Development Quarterly*, 8: 270–285.
- 30 Slavesen, David, and Henry Renski, *The Importance of Quality of Life in the Location Decisions of New Economy Firms*. January 2003. Produced by the Center for Urban and Regional Studies, University of North Carolina at Chapel Hill for the Economic Development Administration, U.S. Department of Commerce. Page 30.
- 31 Haug, P. (1991). “The Location Decisions and Operations of High Technology Organizations in Washington State.” *Regional Studies* 25(6): 525–541.
- 32 Lyne, J. (1991). “U.S. Work-Force Woes Limiting Many Corporate Facility Location Choices” *Site Selection Handbook*, 36 (August) 722–728.

- 33 For an informative discussion of economic clusters, see: Rosenfeld, Stuart, A. Just Clusters: Economic Development Strategies that Reach More People and Places. 2002. Regional Technology Strategy, Inc. Available online at: www.rtsinc.org.
- 34 See, for example, McGranahan, David A., Timothy R. Wojan, Dayton M. Lambert, "The rural growth trifecta: outdoor amenities, creative class and entrepreneurial context," Journal of Economic Geography. May 17, 2010. Available online at: <http://joeg.oxfordjournals.org/content/early/2010/05/12/jeg.lbq007.full?sid=6d1911a5-28ea-4aae-8cec-43693028f42b#fn-12>.
- 35 Winkler R., D.R. Field, A.E. Lulogg, R.S. Krannich and T. Williams 2007. "Social Landscapes of the Inter-Mountain West: a Comparison of 'Old West' and 'New West' communities." Rural Sociology 72 (3): 478-501.
- 36 Gosnell, H. and J. Abrams. 2009. "Amenity Migration: Diverse Conceptualizations of Drivers, Socioeconomic Dimensions, and Emerging Challenges." GeoJournal. Published online 8 July 2009. Rudzitis, G. and H.E. Johansen. 1989. "Migration into Western Wilderness Counties: Causes and Consequences." Western Wildlands. Spring, Pages 19-23. Rudzitis, G. 1999. "Amenities Increasingly Draw People to the Rural West." Rural Development Perspectives. 14(2), 9-13. Rudzitis, G. 1993. "Nonmetropolitan Geography: Migration, Sense of Place, and the American West." Urban Geography. Vol. 14(6): 574-585.
- 37 For resources on this topic, see: <http://headwaterseconomics.org/land/reports/protected-lands-value/>.
- 38 For a copy of the full letter to the President, see: <http://headwaterseconomics.org/land/economists-president-public-lands/>.
- 39 See above references for protected public lands and metro/non-metro definitions. Employment data are from: U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA30.
- 40 Small Business Majority. 2012. Polling results available at: <http://smallbusinessmajority.org/small-business-research/public-lands/index.php>.
- 41 See Technical Report: Evidence for the Effect of Protected Public Lands on Economic Prosperity, available at: http://headwaterseconomics.org/wphw/wp-content/uploads/TechnicalReport_ProtectedLands_Prosperty_2012.pdf.
- 42 U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA30.



P.O. Box 7059, Bozeman, MT 59771
<http://headwaterseconomics.org>
