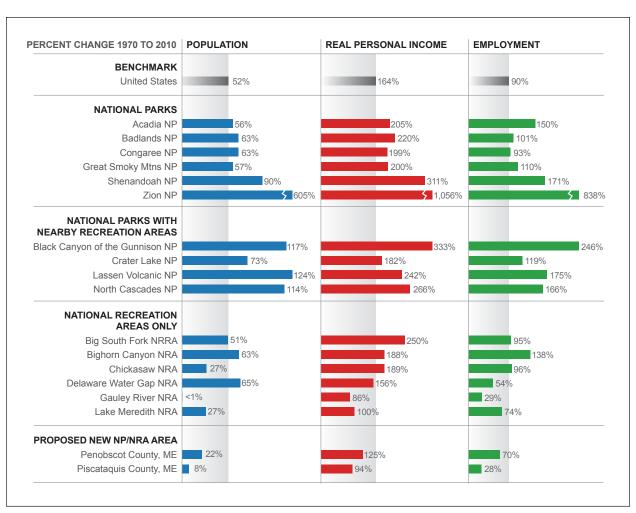


A Comparative Analysis of the Economies of Peer Counties with National Parks and Recreation Areas to Penobscot and Piscataquis Counties, Maine



See also companion report:
The Regional Economy of Penobscot and Piscataquis Counties, Maine
and a Potential National Park and Recreation Area

A Comparative Analysis of the Economies of Peer Counties with National Parks and Recreation Areas to Penobscot and Piscataquis Counties, Maine

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ABOUT THIS REPORT

Headwaters Economics produced this report at the request of Elliotsville Plantation Inc., which owns and manages the private land that could be donated to the National Park Service for the purpose of creating a National Park and associated recreation area to the east of Baxter State Park.

ACKNOWLEDGEMENTS

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ABOUT HEADWATERS ECONOMICS

Headwaters Economics is an independent, nonprofit research group that assists the public and elected officials in making informed choices about land management and community development decisions.

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I. EXECUTIVE SUMMARY

In every case the economies of peer regions with either National Parks alone, or with National Parks that also have nearby National Recreation Areas (NRAs), grew faster than the U.S. as a whole and faster than Penobscot and Piscataquis counties from 1970 to 2010. Both of these areas generally have diversified their economies into a range of services industries, including higher-wage sectors.

This was not the case for peer regions with NRAs alone, where the data show a more uneven picture of economic growth. These regions were less successful at making a transition to a modern services economy, which may explain their difficulty sustaining growth over time.

Recreational visitation and visitor spending make important economic contributions to National Park and NRA regions, supporting local businesses and private sector jobs as well as agency jobs and payrolls. The potential jobs impact of a new National Park and recreation area could range from slightly more than a 1,000 jobs (based on a comparison to peers and including NPS jobs) to just more than 450 jobs (based on capturing a share of Acadia National Park visitation and excluding NPS jobs).

National Parks and National Recreation Areas

National Parks

In 1916 President Woodrow Wilson signed the National Park Service Organic Act into law and created the National Park Service within the U.S. Department of Interior. The Organic Act charged the newly created National Park Service "to conserve the scenery and the natural and historic objects and wildlife therein, and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." This dual mandate—conservation and recreation—continues today as the guiding principle for the nation's National Parks. Within the scope of this mandate, each National Park has unique characteristics and tailored management. Off-road motorized recreation is generally not allowed, though some National Parks allow snowmobiling. Hunting is not permitted except in Alaska. Fishing is allowed. Timber harvesting is not permitted in National Parks.

For more information on National Parks, see: http://www.nps.gov/index.htm.

National Recreation Areas

National Recreation Areas evolved in the early 1960s as a type of federal protected area that focused initially on large reservoirs and water-based recreation. In 1963 President John F. Kennedy issued Executive Branch policy establishing broad criteria for establishing National Recreation Areas and today the primary purpose of NRAs remains outdoor recreation. Other uses are allowed but must be compatible with fulfilling the recreation mission. A range of federal agencies, not just the National Park Service, can manage NRAs. The exact uses permitted vary across NRAs and are specifically detailed in the legislation creating each NRA. National Recreation Areas are less restrictive than National Parks, and often permit a variety of off-road vehicles as well as hunting. Timber harvesting is not permitted in NRAs.

For information on National Recreation Areas, see: http://www.cr.nps.gov/history/online_books/anps/anps_5g.htm.

II. INTRODUCTION

Elliotsville Plantation, Inc. is considering a donation of land to create a National Park and recreation area, along with an endowment for maintenance in the Katahdin Region of Maine. The lands in question are on the eastern edge of Baxter State Park along the East Branch of the Penobscot River.

We conducted this economic analysis under the assumption that there would be up to 150,000 acres of land donated to the National Park Service, of which 75,000 acres would be in a National Park (NP) and 75,000 acres would be in a National Recreation Area (NRA).

This report, along with a companion report—*The Regional Economy of Penobscot and Piscataquis Counties, Maine and a Potential National Park and Recreation Area*—will help readers understand generally whether and how new public land protective designations could offer economic opportunities in Penobscot and Piscataquis counties, Maine.

In this report, Headwaters Economics analyzed the economic performance of local communities adjacent to 16 National Parks and NRAs across the United States. We selected these 16 regions based on similarities such as a combined National Park and NRA, the size of the area, location relative to population centers and airports, and other general features. The Methods section of this report details the peer selection criteria.

This sample of National Parks and NRAs sheds light on how communities adjacent to these protected and recreation assets perform economically. We benchmark this cohort against the U.S. as a whole to show relative performance. We also summarize the performance of these 16 regions and compare them to Penobscot and Piscataquis counties in Maine.

This report begins with methods and data sources, followed by analysis findings. It then has summary tables for NP/NRA peers that show basic size and location characteristics (Figure 1); visitation, visitor spending, and related job impacts (Figure 2); and long-term economic performance comparisons (Figure 3). Finally, the report includes two-page summaries on each NP/NRA peer region.

III. METHODS

The process of selecting peers for context and comparison was conducted as follows.

We first took stock of the lands east of Baxter State Park and the region: size, combination of a National Park and recreation area, location relative to major population centers and airports, and general features.

We then identified three groups of peers: National Parks by themselves, National Parks with adjacent or nearby NRAs, and NRAs alone. We looked at all National Parks and NRAs in the country and eliminated those close to major metropolitan areas (with the exception of Oklahoma City). We eliminated National Parks and NRAs that were more than 1.5 hours from a commercial airport. We eliminated areas undergoing an oil and natural gas boom (e.g., Theodore Roosevelt National Park). We eliminated very large National Parks and NRAs (over 600,000 acres), and some that have unique but very different characteristics (e.g., Mammoth Caves National Park). Finally, we included Oregon Cascade Recreation Area, which is not technically an NRA, because it has many of the same attributes and is managed similarly. ¹

In this report we use the latest published economic data available. All dollar figures are adjusted for inflation—that is, shown in real dollars.

IV. DATA SOURCES

This report uses published demographic, economic, and geographic data from:

U.S. Department of Commerce. 2012. Census Bureau, American Community Survey, Washington, D.C.

U.S. Department of Commerce. 2012. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Tables CA25N and CA30.

National Park Service - Land Resources Division. 2012. Current Administrative Boundaries of National Park System Units. Geospatial Dataset-2188831.

U.S. Geological Survey - Gap Analysis Program. 2011. Protected Areas Database of the United States (PADUS) version 1.2.

U.S. Department of the Interior. 2012. National Park Service, Social Science Program, Economic Benefits to Local Communities from National Park Visitation and Payroll, Washington, D.C., and MGM2 model by Michigan State University.

¹ There are acreage discrepancies between what U.S. Geological Survey and U.S. Forest Service report for Oregon Cascade Recreation Area and Whiskeytown NRA acreage. For Oregon Cascade Recreation Area, U.S. Geological Survey shows 71,429 acres and U.S. Forest Service shows 156,900 acres. For Whiskeytown NRA, U.S. Geological Survey shows 42,138 acres and U.S. Forest Service shows 176,367 acres. The U.S. Geological Survey citation is shown above in the Data Sources section. For U.S. Forest Service documentation, see: http://www.fs.fed.us/recreation/programs/cda/special-areas.shtml.

V. FINDINGS

The data in this report support a number of conclusions about the economies associated with peer National Parks and NRAs to the Katahdin Region.

Growth Performance:

- Peer regions with *only* a National Park in every case outpaced the United States and Penobscot and Piscataquis counties in standard measures of economic growth—population, employment, and real personal income—from 1970 to 2010.
- Peer National Park and NRA regions in every case outpaced the United States and Penobscot and Piscataquis counties in standard measures of economic growth—population, employment, and real personal income—from 1970 to 2010. This peer grouping consistently posted higher growth rates across the range of socioeconomic measures.
- Regions with NRAs *only* show mixed performance compared to the United States and Penobscot and Piscataquis counties in standard measures of economic growth—population, employment, and real personal income—from 1970 to 2010. Half came out ahead of and half behind the U.S.; just over half outperformed Penobscot County; and all but one NRA peer grew more quickly than Piscataquis County.

Shift in Economic Structure:

- Peer National Park and NRA regions generally have seen their economies diversify into
 predominately services-oriented economies, paralleling broader industry trends and growth
 opportunities at the state and national level.
- Peer National Park and NRA regions have been successful competing for relatively higher-wage services industries such as health care, finance and insurance, and professional and technical services.
- Across the country, as in most peer regions, manufacturing (often with a forest products emphasis) and construction account for most job losses from 2001 to 2010.
- NRA regions without associated National Parks generally have been less successful at making a transition to a modern services economy, which may explain their greater difficulty sustaining growth over time.

General Economic Impacts:

- Recreational visitation and visitor spending make important economic contributions to National Park and NRA region economies. These benefits include non-local spending that supports local jobs and businesses, and National Park Service jobs and payrolls.
- National Parks are generally considered the gold standard for protected areas. They have the highest visibility and arguably the best brand with domestic and international visitors.
- When combined with National Parks, peer NRAs draw more visits and spending as well as support greater employment benefits.
- Peer National Park and NRA regions stimulate more than travel and tourism activity; they also
 are strongly associated with diversifying economies that support relatively rapid rates of
 economic growth.

Potential Job Impacts:

- To estimate jobs that could potentially be created by a new National Park and NRA, we evaluated National Park Service data for nine of the ten National Park peers examined in this report, including four that also have NRAs nearby. Spending by visitors in the local economy resulted, on average, in 839 local private sector jobs. These park units also directly employed, on average, 216 National Park Service workers and contractors. The combined average private and public sector employment related to these parks was 1,055 jobs.
- Another way to estimate the potential jobs impact is to assume that a new National Park in the Katahdin Region would capture a percentage of the 2.5 million annual visitors to nearby Acadia National Park. If a new park captures 15 percent of the visitation to Acadia National Park (375,600 visitors) and visitor spending is typical of what it is in similar National Parks (\$56/day), a new park could potentially create 451 new private sector jobs. The National Park Service also would create additional public sector jobs.
- The above estimates reflect potential jobs directly tied to visitation, tourism, and National Park Service employment. In addition, there are other potential job benefits associated with the region's ability to attract people and business in other economics sectors based on National Park branding, improved quality of life, and travel stimulated business migration.

² Great Smoky Mountains National Park is not included because it is an outlier with high visitation: more than nine million annual visitors.

³ Visitation, expenditures, and jobs estimates are from U.S. Department of the Interior. 2012. National Park Service, Social Science Program, Economic Benefits to Local Communities from National Park Visitation and Payroll, Washington, D.C., and MGM2 model by Michigan State University.

⁴ These job estimates were calculated using these steps: (1) determine average visitation to ten similar national park units (not counting visitation to nearby National Recreation Areas to avoid double counting); (2) calculate average spending per visitor and average private sector jobs created by non-local visitor spending; (3) calculate average local private sector jobs per dollar spent; (4) multiply this figure times estimate of 15 percent of total visitor spending to Acadia National Park.

Figure 1: National Park and NRA Peers, Select Characteristics

	STATE	ACRES	NEARBY CITY WITH AIRPORT	CITY POPULATION (2010)	COUNTIES
NATIONAL PARKS					
Acadia NP	ME	38,790	Bangor	33,039	Hancock
Badlands NP	SD	242,734	Rapid City	67,956	Haakon, Jackson, Pennington, Shannon
Congaree NP	sc	24,249	Columbia	129,272	Calhoun, Richland
Great Smoky Mountains NP	NC	518,485	Asheville	83,393	Buncombe, Haywood, Madison, Swain
Shenandoah NP	NA	193,275	Charlottesville	43,475	Albemarle, Greene, Madison, Rappahannock
Zion NP	T)	148,708	Cedar City St. George	28,857 72,897	Iron, Washington
NATIONAL PARKS WITH NEARBY RECREATION AREAS					
Black Canyon of The Gunnison NP Curecanti NRA	00	31,356	Grand Junction Montrose	58,566 19,132	Gunnison, Montrose
Crater Lake NP Oregon Cascade RA*	OR	181,784	Klamath Falls Medford	20,840 74,907	Klamath, Jackson, Douglas
Lassen Volcanic NP Whiskeytown NRA	CA	107,374	Redding	89,861	Lassen, Shasta
North Cascades NP Lake Chelan NRA Ross Lake NRA	WA	501,072 63,162 116,915	Bellingham	80,885	Chelan, Okanogan, Skagit, Whatcomb
NATIONAL RECREATION AREAS ONLY					
Big South Fork NRRA	N.	122,504	Knoxville	178,874	Fentress, Morgan, Scott
Bighorn Canyon NRA	TM	119,827	Billings	104,170	Bighorn, Carbon, Yellowstone
Chickasaw NRA	OK	9.877	Oklahoma City	579,999	Murray
Delaware Water Gap NRA	PA	68,608	Allentown	118,032	Monroe, Northampton, Warren
Gauley River NRA	W	11,158	Charleston	51,400	Fayette, Nicholas
Lake Meredith NRA	X	41,627	Amarillo	190,695	Carson, Hutchison, Moore, Potter

*Oregon Cascade Recreation Area is not technically an NRA.

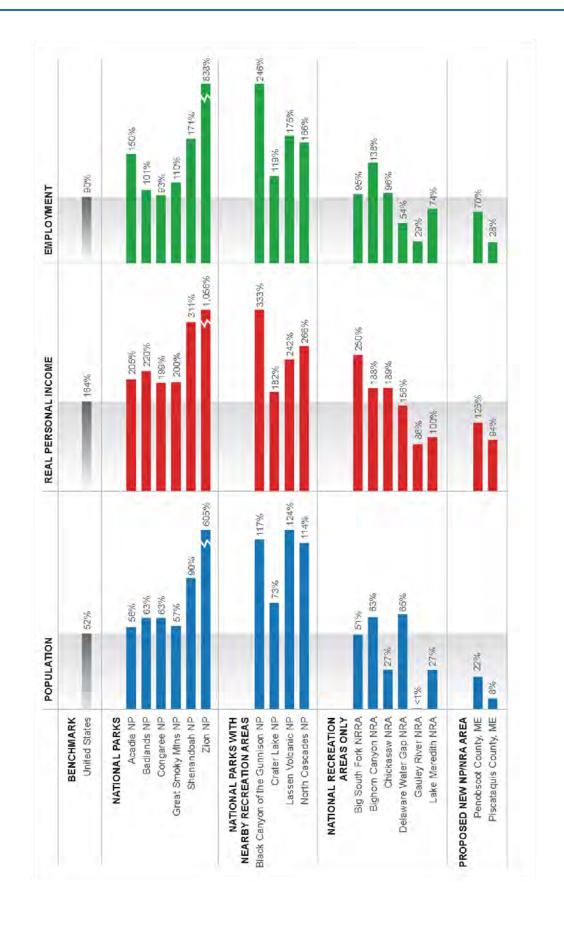
Figure 2: National Park and NRA Peers, Visitation, Non-Local Spending, and Related Jobs, 2010

	VISITATION	VISITOR SPENDING (IN \$2011S)	JOBS FROM NON-LOCAL SPENDING	NPS JOBS (INCLUDES CONTRACTORS)	TOTAL JOBS
NATIONAL PARKS					
Acadia NP	2,504,210	\$192,162,923	3,147	184	3,331
Badlands NP	977,778	\$23,908,698	375	100	475
Congaree NP	121,208	\$2,876,017	44	31	75
Great Smoky Mountains NP	9,463,540	\$844,025,416	11,367	399	11,766
Shenandoah NP	1,253,390	\$74,016,179	968	314	1,282
Zion NP	2,665,970	\$127,633,061	2,136	265	2,401
NATIONAL PARKS WITH NEARBY RECREATION AREAS					
Black Canyon of The Gunnison NP Curecanti NRA	176,344 969,549	\$8,597,104	112 478	33	145 546
Crater Lake NP Oregon Cascade RA*	448,319 na	\$35,187,884 na	540 na	129 na	669 na
Lassen Volcanic NP Whiskeytown NRA	384,570 788,065	\$16,559,793	207 420	109	316 529
North Cascades NP Lake Chelan NRA*** Ross Lake NRA***	24,659 39,249 682,736	\$1,583,460 \$7,604,091 \$21,103,859	21 20 254	192 na na	213 20 254
NATIONAL RECREATION AREAS ONLY					
Big South Fork NRRA	656,374	\$27,413,973	331	89	399
Bighorn Canyon NRA	258,637	\$7,805,890	106	62	168
Chickasaw NRA	1,253,640	\$17,698,646	174	91	265
Delaware Water Gap NRA	5,285,760	\$156,036,310	2,087	164	2,251
Gauley River NRA	107,223	\$4,580,171	58	14	72
Lake Meredith NRA	883,586	\$37,602,790	435	54	489
				_	

*Data not available: Recreation Area administered by United States Forest Service. **No National Park Service jobs are reported for these NRAs.

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Figure 3: National Park and NRA Peers, Percent Change in Population, Real Personal Income, and Employment, 1970 to 2010

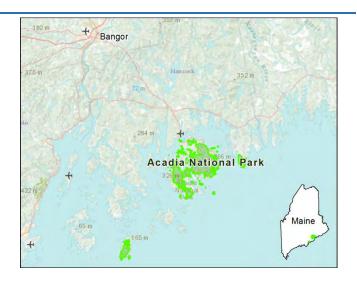


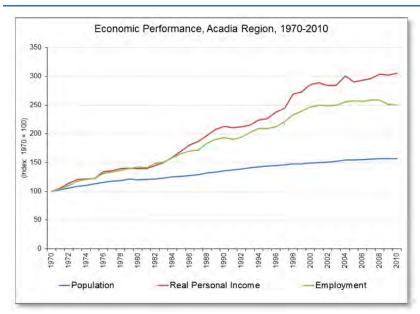
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Acadia National Park

Key Facts:

- Acadia National Park was established in 1919 and encompasses 38,790 acres. http://www.nps.gov/acad/index.htm
- Nearby cities with an airport: Bangor, ME (pop. 33,039).
- Counties included in this analysis: Hancock, ME.



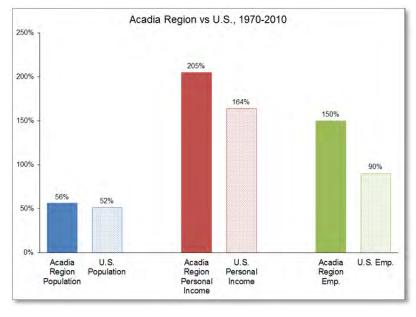


Long-Term Growth Trends

The Acadia region grew steadily during the four decades from 1970 to 2010.

The several short periods of decline coincide with significant national recessions.

Real personal income outpaced employment growth, which in turn outstripped population growth.



Growth Compared to the U.S.

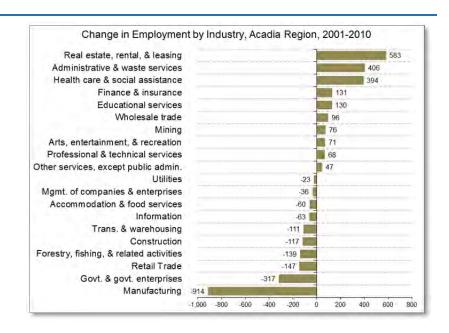
Like many counties near National Park units, the Acadia region outpaced the U.S. in standard measures of growth from 1970 to 2010.

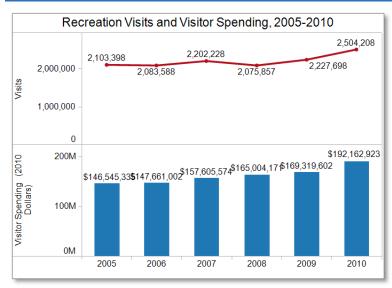
The region's population grew by 56 percent (vs. 52% for the U.S.), real personal income grew by 205 percent (vs. 164% for the U.S.), and employment grew by 150 percent (vs. 90% for the U.S.) from 1970 to 2010.

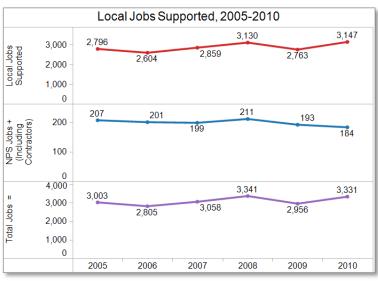
The regional economy (Hancock County) created 2,002 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in services industries and many were in relatively high-wage sectors such as real estate, health care, finance, and insurance.

The biggest job losses were in manufacturing. Government employment also shrank.







Economic Impact of Acadia National Park

In 2010, there were 2,504,208 Park visits, which resulted in more than \$192 million in spending on hotels, restaurants, transportation, guides, etc.

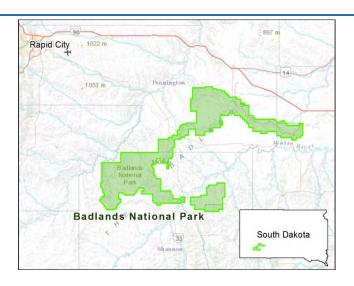
These expenditures supported 3,331 jobs directly associated with the Park. This includes 3,147 local jobs and 184 National Park Service jobs.

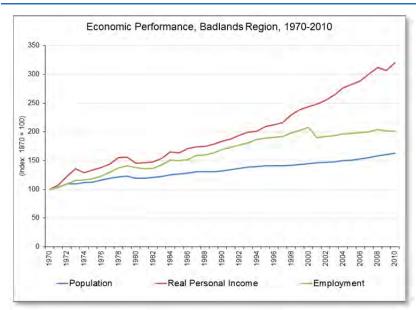
For more information on the economic impact of National Parks, see: http://headwaterseconomic-impact-of-national-parks/

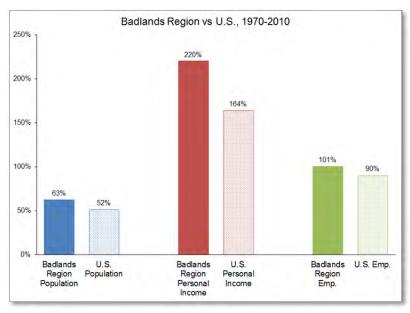
Badlands National Park

Key Facts:

- Badlands National Park was established in 1978 and encompasses 242,734 acres. http://www.nps.gov/badl/index.htm
- Nearby cities with an airport: Rapid City, SD (pop. 129,272).
- Counties included in this analysis: Haakon, Jackson, Pennington, and Shannon, SD.







Long-Term Growth Trends

The Badlands region grew steadily during the four decades from 1970 to 2010.

Three short periods of decline in the early 1970s and 1980s, and in the late 2000s coincided with significant national recessions.

Real personal income outpaced employment growth, which in turn outstripped population growth.

Growth Compared to the U.S.

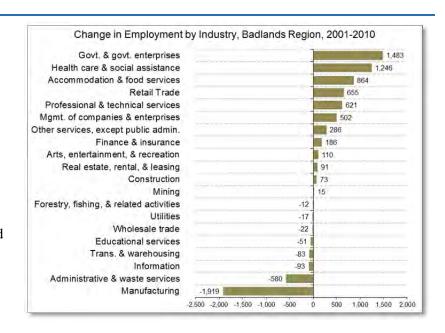
Like many counties near National Park units, the Badlands region outpaced the U.S in standard measures of growth from 1970 to 2010.

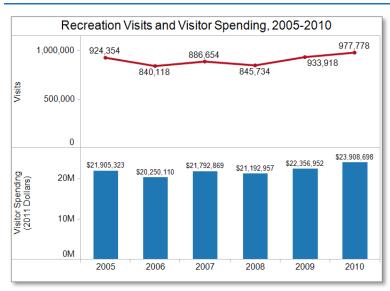
The region's population grew by 63 percent (vs. 52% for the U.S.), real personal income grew by 220 percent (vs. 164% for the U.S.) and employment grew by 101 percent (vs. 90% for the U.S.) from 1970 to 2010.

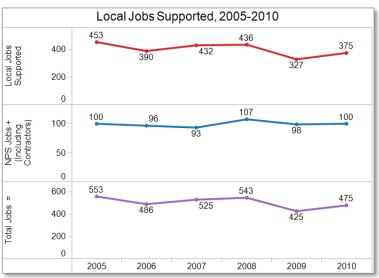
The regional economy (Haakon, Jackson, Pennington, and Shannon counties) created 6,132 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in services industries and government, and many were in relatively high-wage sectors such as health care, and professional and technical services.

Like the rest of the country, the biggest job losses were in manufacturing.







Economic Impact of Badlands National Park

In 2010, there were 977,778 Park visits, which resulted in nearly \$24 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 475 jobs directly associated with the Park. This includes 375 local jobs and 100 National Park Service jobs.

For more information on the economic impact of National Parks, see:

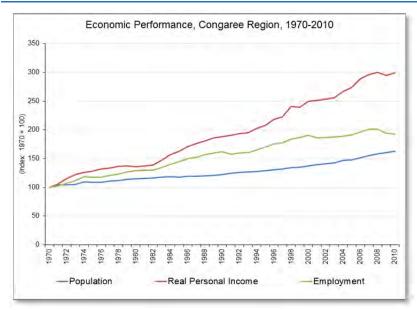
http://headwaterseconomics.org/headwaters/economic-impact-of-national-parks/

Congaree National Park

Key Facts:

- Congaree National Park was established in 2003 and encompasses 24,249 acres.
- http://www.nps.gov/cong/index.htm
- Nearby cities with an airport: Columbia, SC (pop. 129,272).
- Counties included in this analysis: Calhoun and Richland, SC.



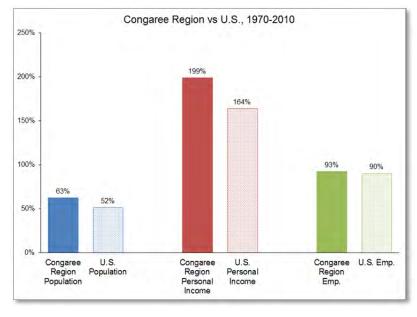


Long-Term Growth Trends

The Congaree region grew steadily during the four decades from 1970 to 2010.

The short periods of decline coincide with significant national recessions.

Real personal income outpaced employment growth, which in turn outstripped population growth.



Growth Compared to the U.S.

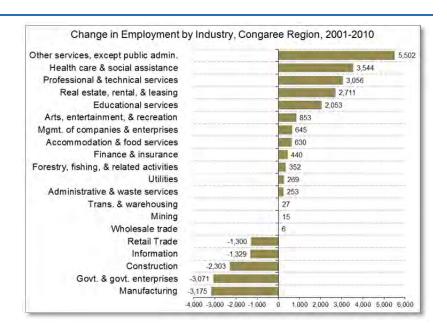
Like many counties near National Park units, the Congaree region outpaced the U.S. in standard measures of growth from 1970 to 2010.

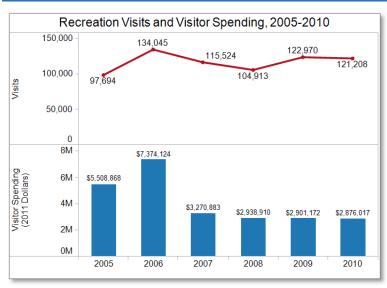
The region's population grew by 63 percent (vs. 52% for the U.S.), real personal income grew by 199 percent (vs. 164% for the U.S.), and employment grew by 93 percent (vs. 90% for the U.S.) from 1970 to 2010.

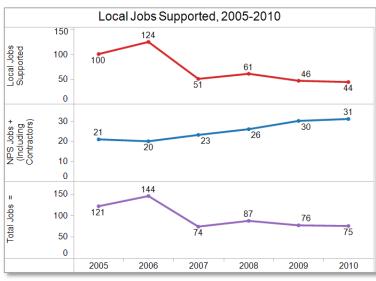
The regional economy (Calhoun and Richland counties) created 20,356 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in services industries and many were in relatively high-wage sectors such as health care, and professional and technical services.

Like the rest of the country, the biggest job losses were in manufacturing. Government employment also shrank.







Economic Impact of Congaree National Park

In 2010, there were 121,208 Park visits, which resulted in nearly \$3 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 75 jobs directly associated with the Park. This includes 44 local jobs and 31 National Park Service jobs.

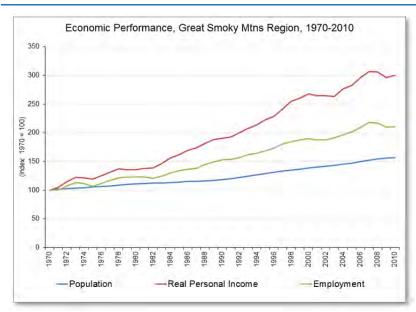
For more information on the economic impact of National Parks, see: http://headwaters/economic-impact-of-national-parks/

Great Smoky Mountains National Park

Key Facts:

- Great Smoky Mountains National Park was established in 1934 and encompasses 518,485 acres.
 - http://www.nps.gov/grsm/index.htm
- Nearby cities with an airport: Asheville, NC (pop. 83,393).
- Counties included in this analysis: Buncombe, Haywood, Madison, and Swain, NC.



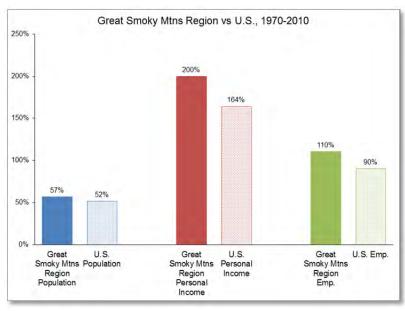


Long-Term Growth Trends

The Great Smoky Mountains region grew steadily during the four decades from 1970 to 2010.

Two short periods of decline at the turn of the century and in the late 2000s coincided with significant national recessions.

Real personal income outpaced employment growth, which in turn outstripped population growth.



Growth Compared to the U.S.

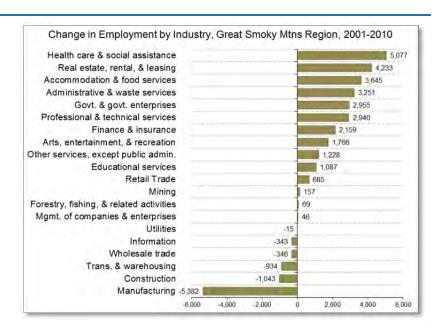
Like many counties near National Park units, the Great Smoky Mountains region outpaced the U.S. in standard measures of growth from 1970 to 2010.

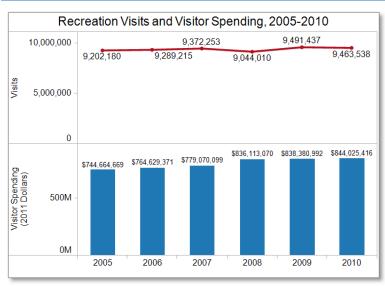
The region's population grew by 57 percent (vs. 52% for the U.S.), real personal income grew by 200 percent (vs. 164% for the U.S.), and employment grew by 110 percent (vs. 90% for the U.S.) from 1970 to 2010.

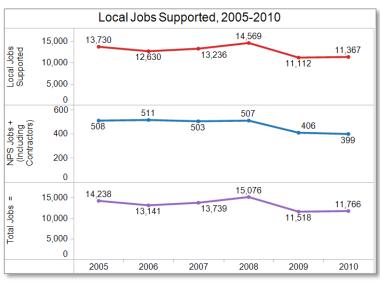
The regional economy (Buncombe, Haywood, Madison, and Swain counties) created 29,298 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in services industries and many were in relatively high-wage sectors such as health care, and professional and technical services.

Like the rest of the country, the biggest job losses were in manufacturing and construction.







Economic Impact of Great Smoky Mountain National Park

In 2010, there were 9,463,538 Park visits, which resulted in more than \$844 million in spending on hotels, restaurants, transportation, guides, etc.

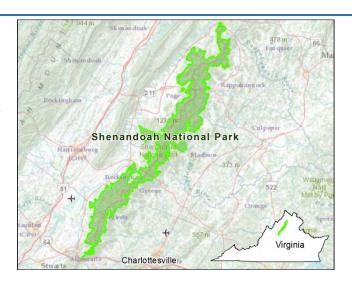
These expenditures supported 11,766 jobs directly associated with the Park. This includes 11,367 local jobs and 399 National Park Service jobs.

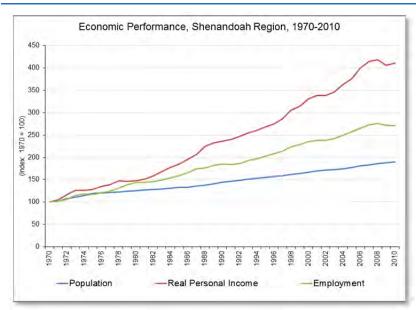
For more information on the economic impact of National Parks, see: http://headwaters/economic-impact-of-national-parks/

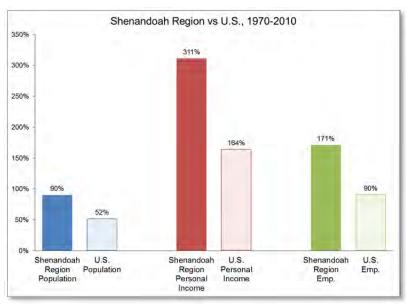
Shenandoah National Park

Key Facts:

- Shenandoah National Park was established in 1926 and encompasses 193,275 acres. http://www.nps.gov/shen/index.htm
- Nearby cities with an airport: Charlottseville, VA (pop. 43,475).
- Counties included in this analysis: Albermarle, Greene, Madison, and Rappahannock, VA.







Long-Term Growth Trends

The Shenandoah region grew steadily during the four decades from 1970 to 2010.

One period of decline in the late 2000s, mainly affecting personal income, coincided with a significant national recession.

Real personal income outpaced employment growth, which in turn outstripped population growth.

Growth Compared to the U.S.

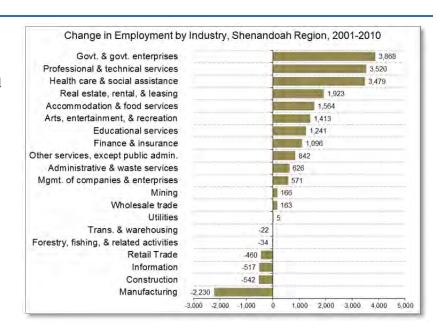
Like many counties near National Park units, the Shenandoah region outpaced the U.S. in standard measures of growth from 1970 to 2010.

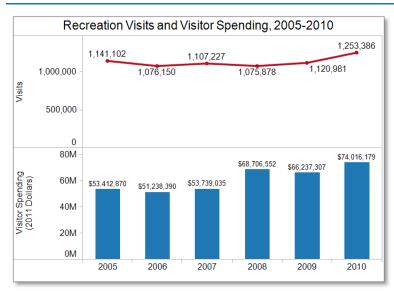
The region's population grew by 90 percent (vs. 52% for the U.S.), real personal income grew by 311 percent (vs. 164% for the U.S.), and employment grew by 171 percent (vs. 90% for the U.S.) from 1970 to 2010.

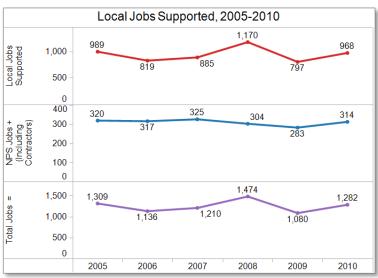
The regional economy (Albermarle, Greene, Madison, and Rappahannock counties) created 20,477 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in government and services industries, and many were in relatively high-wage sectors such as professional and technical services and health care.

Like the rest of the country, the biggest job losses were in manufacturing and construction.







Economic Impact of Shenandoah National Park

In 2010, there were 1,253,386 Park visits, which resulted in more than \$74 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 1,282 jobs directly associated with the Park. This includes 968 local jobs and 314 National Park Service jobs.

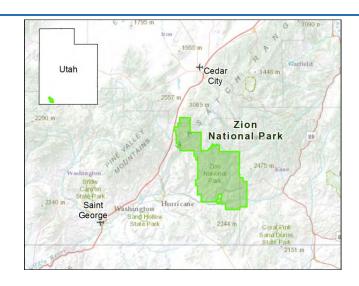
For more information on the economic impact of National Parks, see: <a href="http://headwaterseconomics.org/headwaterseconomic

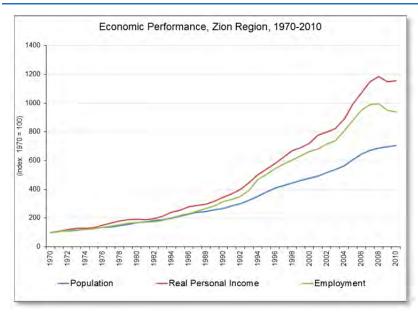
ters/economic-impact-of-national-parks/

Zion National Park

Key Facts:

- Zion National Park was established in 1919 and encompasses 148,708 acres. http://www.nps.gov/zion/index.htm
- Nearby cities with an airport: Cedar City, UT (pop. 28,857) and St. George (pop. 72,897).
- Counties included in this analysis: Iron and Washington, UT.



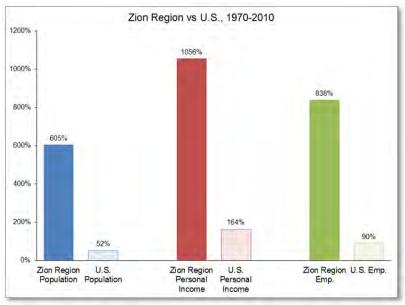


Long-Term Growth Trends

The Zion region grew steadily during the four decades from 1970 to 2010.

One period of decline in the late 2000s coincided with a significant national recession.

Real personal income outpaced employment growth, which in turn outstripped population growth.



Growth Compared to the U.S.

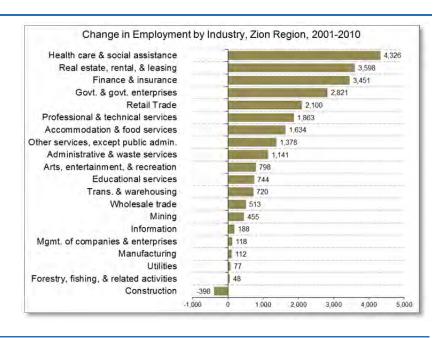
Like many counties near National Park units, the Zion region outpaced the U.S. in standard measures of growth from 1970 to 2010.

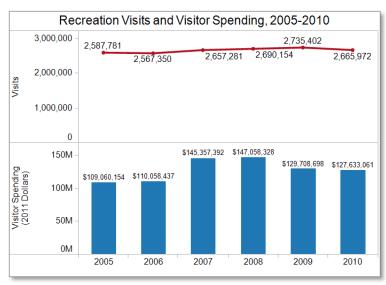
The region's population grew by 605 percent (vs. 52% for the U.S.), real personal income grew by 1,056 percent (vs. 164% for the U.S.), and employment grew by 838 percent (vs. 90% for the U.S.) from 1970 to 2010.

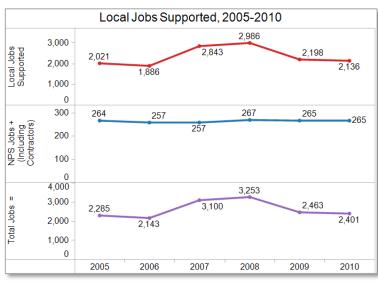
The regional economy (Iron and Washington counties) created 26,085 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in services industries and most were in relatively high-wage sectors such as health care, real estate, finance, and insurance.

The only job losses were in construction.







Economic Impact of Zion National Park

In 2010, there were 2,665,972 Park visits, which resulted in more than \$127 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 2,401 jobs directly associated with the Park. This includes 2,136 local jobs and 265 National Park Service jobs.

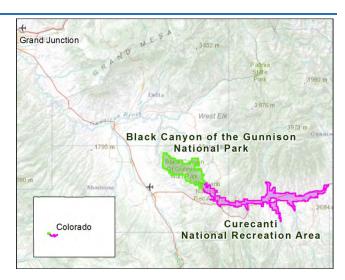
For more information on the economic impact of National Parks, see: http://headwaters/economic-impact-of-national-parks/

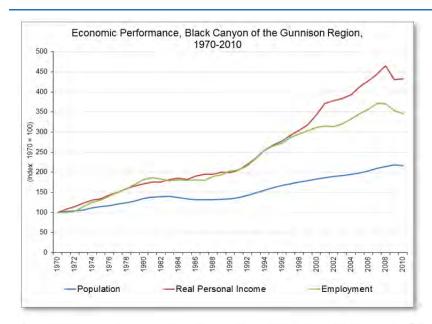
Black Canyon of the Gunnison National Park

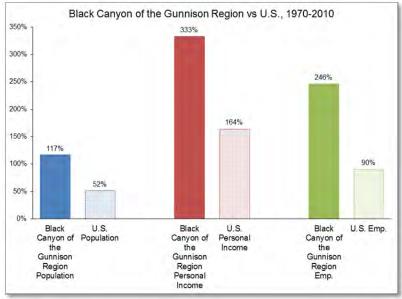
& Curecanti National Recreation Area

Key Facts:

- Black Canyon of the Gunnison National Park was established in 1999 and encompasses 31,356 acres. http://www.nps.gov/blca/index.htm
- Curecanti NRA was established in 1945 and encompasses 41,013 acres. http://www.nps.gov/cure/index.htm
- Nearby cities with an airport: Grand Junction, CO (pop. 58,556) and Montrose, CO (pop. 19,132).
- Counties included in this analysis: Gunnison and Montrose, CO.







Long-Term Growth Trends

The Black Canyon of the Gunnison/Curecanti region grew steadily during the four decades from 1970 to 2010.

The only significant period of economic decline coincides with the most recent national recession.

Real personal income outpaced employment growth, which in turn outstripped population growth.

Growth Compared to the U.S.

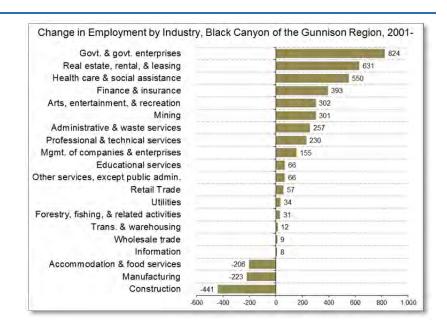
Like many counties near National Park units, the Black Canyon of the Gunnison/Curecanti region outpaced the U.S. in standard measures of growth from 1970 to 2010.

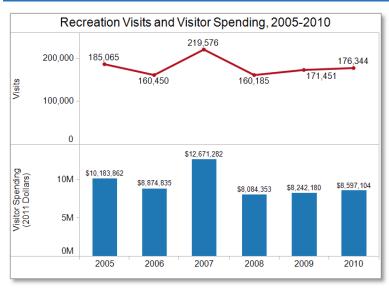
The region's population grew by 117 percent (vs. 52% for the U.S.), real personal income grew by 333 percent (vs. 164% for the U.S.), and employment grew by 246 percent (vs. 90% for the U.S.) from 1970 to 2010.

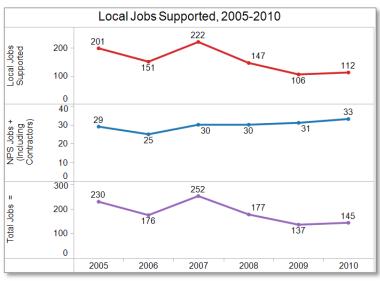
The regional economy (Gunnison and Montrose counties) created 3,926 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in government and services industries, and most were in relatively high-wage sectors such as real estate, health care, finance, and, insurance.

Like the rest of the country, the biggest job losses were in construction and manufacturing.







Economic Impact of Black Canyon of the Gunnison National Park

In 2010, there were 176,344 Park visits, which resulted in more than \$8 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 145 jobs directly associated with the Park. This includes 112 local jobs and 33 National Park Service jobs.

Economic Impact of Curecanti NRA (graphics not shown)

In 2010, there were 969,549 NRA visits, which resulted in nearly \$41 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 546 jobs directly associated with the NRA. This includes 478 local jobs and 68 National Park Service jobs.

For more information on the economic impact of National Parks and NRAs, see:

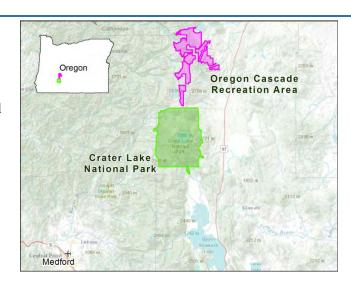
http://headwaterseconomics.org/headwaters/economic-impact-of-national-parks/

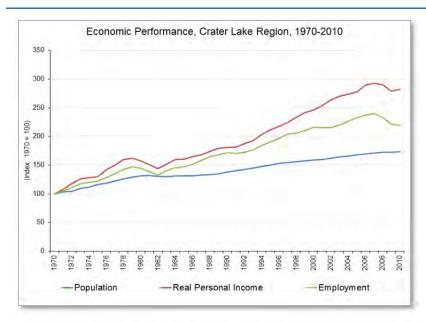
Crater Lake National Park

& Oregon Cascade Recreation Area

Key Facts:

- Crater Lake National Park was established in 1902 and encompasses 181,784 acres. http://www.nps.gov/crla/index.htm
- Oregon Cascade Recreation Area was established in 1984 and encompasses 156,900 acres.
- Nearby cities with an airport: Klamath Falls, OR (pop. 20,840) and Medford, OR (pop. 74,907).
- Counties included in this analysis: Douglas, Jackson, and Klamath, OR.



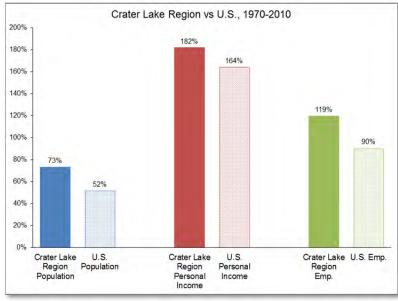


Long-Term Growth Trends

The Crater Lake/Oregon Cascade region grew steadily during the four decades from 1970 to 2010.

Two short periods of decline in the early 1980s and late 2000s coincided with significant national recessions.

Real personal income outpaced employment growth, which in turn outstripped population growth.



Growth Compared to the U.S.

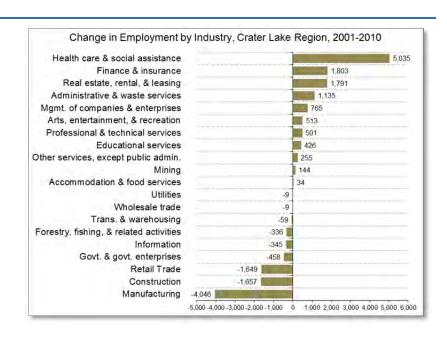
Like many counties near National Park units, the Crater Lake/Oregon Cascade region outpaced the U.S. in standard measures of growth from 1970 to 2010.

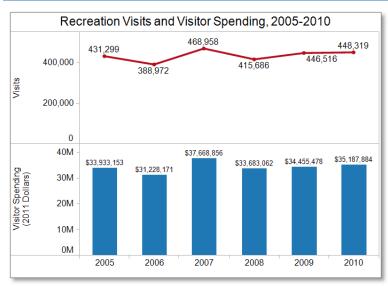
The region's population grew by 73 percent (vs. 52% for the U.S.), real personal income grew by 182 percent (vs. 164% for the U.S.), and employment grew by 119 percent (vs. 90% for the U.S.) from 1970 to 2010.

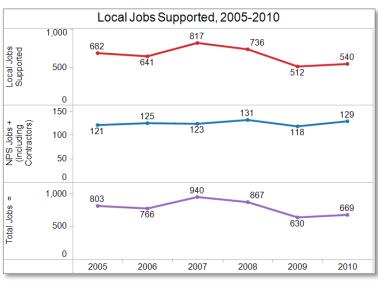
The regional economy (Douglas, Jackson, and Klamath counties) created 12,402 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in services industries and most were in relatively high-wage sectors such as health care, finance, insurance, and real estate.

Like the rest of the country, the biggest job losses were in manufacturing and construction.







Economic Impact of Crater Lake National Park

In 2010, there were 448,319 Park visits, which resulted in more than \$35 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 669 jobs directly associated with the Park. This includes 540 local jobs and 129 National Park Service jobs.

<u>Note</u>: no economic impact data are available for the Oregon Cascade Recreation Area.

For more information on the economic impact of National Parks and NRAs, see:

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

Lassen Volcanic National Park

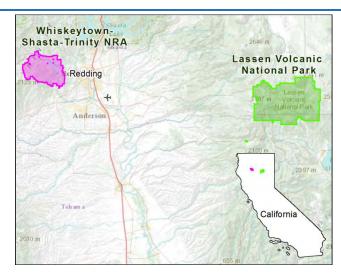
& Whiskeytown National Recreation Area

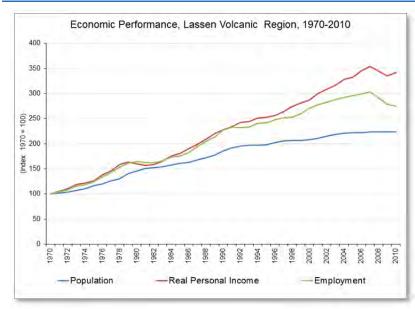
Key Facts:

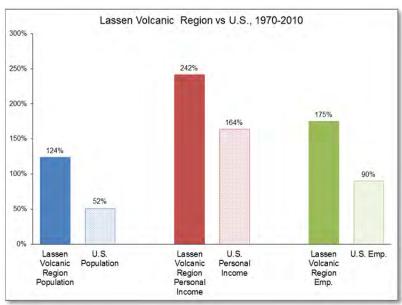
• Lassen Volcanic National Park was established in 1916 and encompasses 107,374 acres.

http://www.nps.gov/lavo/index.htm

- Whiskeytown NRA was established in 1965 and encompasses 176,367 acres. http://www.nps.gov/whis/index.htm
- Nearby cities with an airport: Redding, CA (pop. 89,861).
- Counties included in this analysis: Lassen and Shasta, CA.







Long-Term Growth Trends

The Lassen Volcanic/ Whiskeytown region grew steadily during the four decades from 1970 to 2010.

Two short periods of decline in the early 1980s and late 2000s coincided with significant national recessions.

Real personal income outpaced employment growth, which in turn outstripped population growth.

Growth Compared to the U.S.

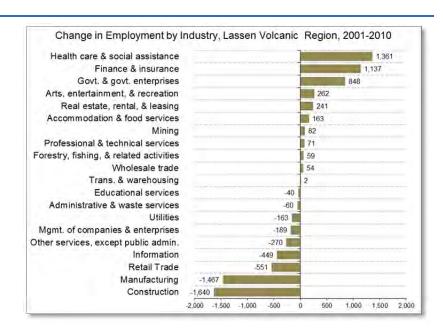
Like many counties near National Park units, the Lassen Volcanic/ Whiskeytown region outpaced the U.S. in standard measures of growth from 1970 to 2010.

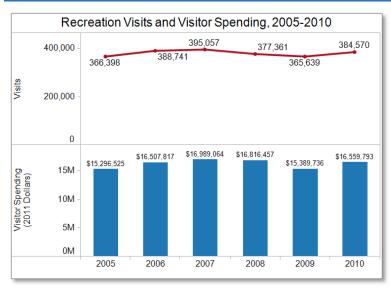
The region's population grew by 124 percent (vs. 52% for the U.S.), real personal income grew by 242 percent (vs. 164% for the U.S.), and employment grew by 175 percent (vs. 90% for the U.S.) from 1970 to 2010.

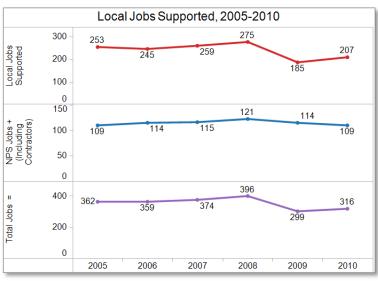
The regional economy (Lassen and Shasta counties) created 4,280 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in services industries and government, and most were in relatively high-wage sectors such as health care, finance, and insurance.

Like the rest of the country, the biggest job losses were in construction and manufacturing.







Economic Impact of Lassen Volcanic National Park

In 2010, there were 384,570 Park visits, which resulted in nearly \$17 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 316 jobs directly associated with the Park. This includes 207 local jobs and 109 National Park Service jobs.

Economic Impact of Whiskeytown NRA (graphics not shown)

In 2010, there were 788,065 NRA visits, which resulted in nearly \$34 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 529 jobs directly associated with the NRA. This includes 420 local jobs and 109 National Park Service jobs.

For more information on the economic impact of National Parks and NRAs, see:

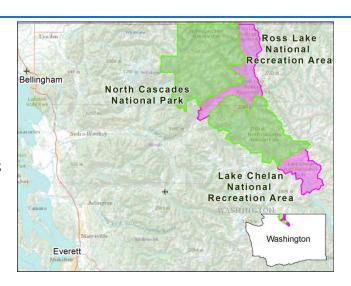
http://headwaterseconomics.org/headwaters/economic-impact-of-national-parks/

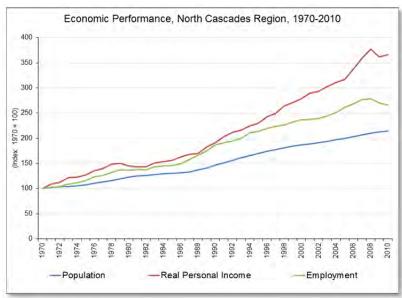
North Cascades National Park

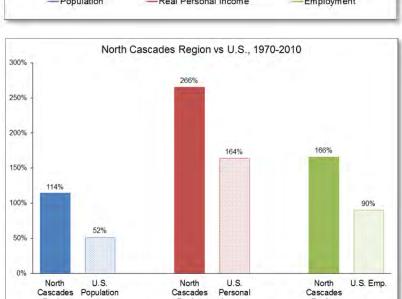
& Lake Chelan National Recreation Area & Ross Lake National Recreation Area

Key Facts:

- North Cascades National Park was established in 1968 and encompasses 501,072 acres. http://www.nps.gov/noca/index.htm
- Lake Chelan NRA was established in 1968 with 63,162 acres; Ross Lake NRA was established in 1968 with 116,915 arcres.
- Nearby cities with an airport: Bellingham, WA (pop. 80,885).
- Counties included in this analysis: Chelan, Okanogan, Skagit, and Whatcomb, WA.







Region

Personal

Region

Long-Term Growth Trends

The North Cascades Complex region grew steadily during the four decades from 1970 to 2010.

Two short periods of decline in the early 1980s and late 2000s coincided with significant national recessions.

Real personal income outpaced employment growth, which in turn outstripped population growth.

Growth Compared to the U.S.

Like many counties near National Park units, the North Cascades Complex region outpaced the U.S. in standard measures of growth from 1970 to 2010.

The region's population grew by 114 percent (vs. 52% for the U.S.), real personal income grew by 266 percent (vs. 164% for the U.S.), and employment grew by 166 percent (vs. 90% for the U.S.) from 1970 to 2010.

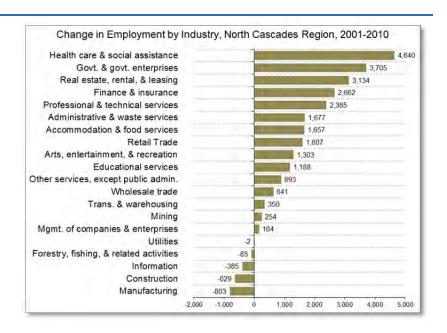
HEADWATERS ECONOMICS 27

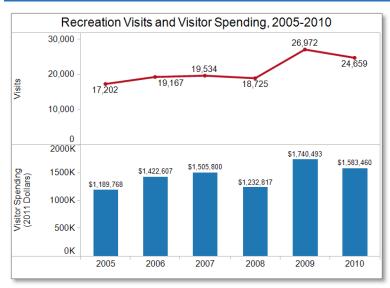
Region

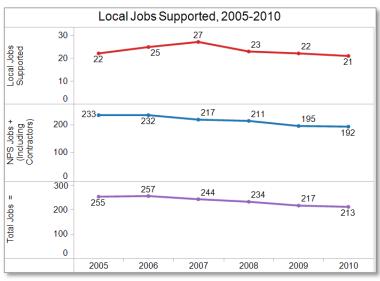
The regional economy (Chelan, Okanogan, Skagit, and Whatcomb counties) created 26,260 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in services industries and government, and most were in relatively high-wage sectors such as health care, real estate, finance, and insurance.

Like the rest of the country, the biggest job losses were in manufacturing and construction.







Economic Impact of North Cascades National Park

In 2010, there were 24,659 Park visits, which resulted in \$1.6 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 213 jobs directly associated with the Park. This includes 21 local jobs and 192 National Park Service jobs.

Economic Impact of Lake Chelan and Ross Lake NRAs (graphics not shown)

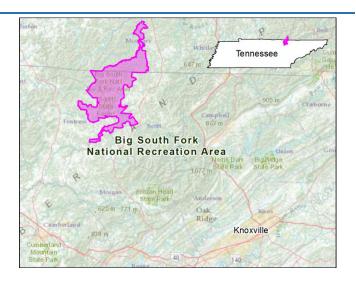
In 2010, there were 39,249 Lake Chelan NRA visits, which resulted in \$1.6 million in spending on hotels, restaurants, transportation, guides, etc. These expenditures supported 20 local jobs in the region.

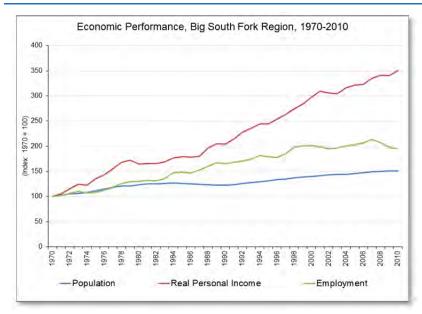
In 2010, there were 682,736 Ross Lake NRA visits, which resulted in more than \$21 million in spending on hotels, restaurants, transportation, guides, etc. These expenditures supported 254 local jobs in the region.

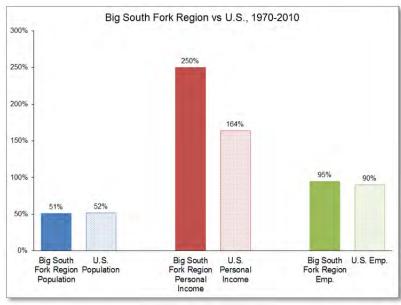
Big South Fork National River and Recreation Area

Key Facts:

- Big South Fork NRRA was established in 1974 and encompasses 122,504 acres. http://www.nps.gov/biso/index.htm
- Nearby cities with an airport: Knoxville, TN (pop. 178,874).
- Counties included in this analysis:
 Fentress, Morgan, and Scott, TN.







Long-Term Growth Trends

The Big South Fork region grew steadily during the four decades from 1970 to 2010.

Short periods of decline in the early 1980s, at the turn of the century, and in the late 2000s coincided with significant national recessions.

Real personal income outpaced employment growth, which in turn outstripped population growth.

Growth Compared to the U.S.

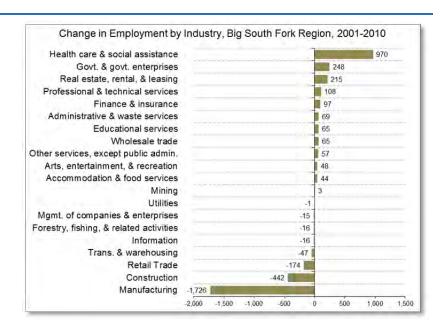
Unlike many counties near National Park units, the Big South Fork region did not outpace the U.S. across the board in standard measures of growth from 1970 to 2010.

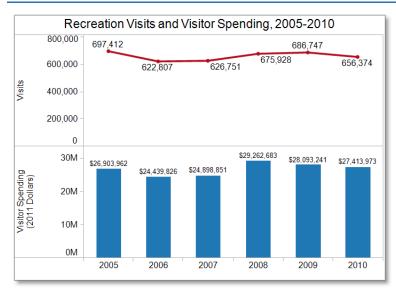
The region's population grew by 51 percent (vs. 52% for the U.S.), real personal income grew by 250 percent (vs. 164% for the U.S.), and employment grew by 95 percent (vs. 90% for the U.S.) from 1970 to 2010.

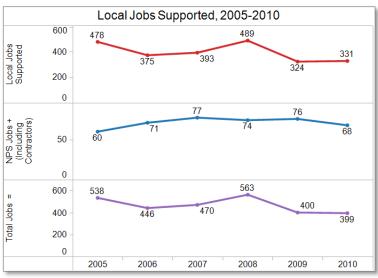
The regional economy (Fentress, Morgan, and Scott counties) created 1,989 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in services industries and government, and most were in relatively high-wage sectors such as health care, real estate, and professional and technical services.

Like the rest of the country, the biggest job losses were in manufacturing and construction—these losses were significant enough that the region had a net loss of jobs during the last decade.







Economic Impact of Big South Fork NRRA

In 2010, there were 656,374 NRRA visits, which resulted in more than \$27 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 399 jobs directly associated with the NRRA. This includes 331 local jobs and 68 National Park Service jobs.

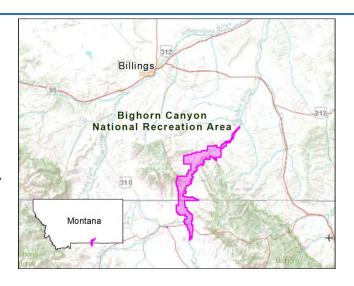
For more information on the economic impact of NRAs, see:

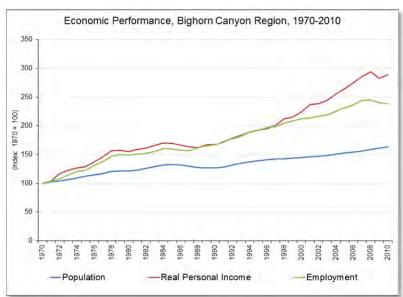
http://headwaterseconomics.org/headwaters/economic-impact-of-national-parks/

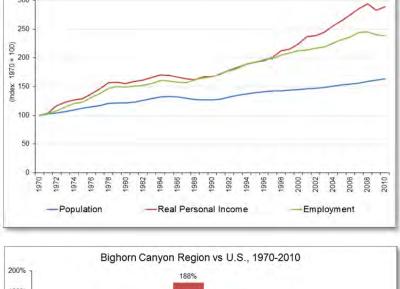
Bighorn Canyon National Recreation Area

Key Facts:

- Bighorn Canyon NRA was established in 1966 and encompasses 119,827 acres. http://www.nps.gov/bica/index.htm
- Nearby cities with an airport: Billings, MT (pop. 104,170).
- Counties included in this analysis: Bighorn, Carbon, and Yellowstone, MT.







180% 164% 160% 138% 140% 120% 100% 90% 80% 60% 40% 20% 0% Bighorn Canyon U.S. Emp. Bighorn Canyon US Bighorn US Population Canyon Persona Region Region Region Income

Long-Term Growth Trends

The Bighorn Canyon region grew steadily during the four decades from 1970 to 2010.

Two short periods of decline in the late 1980s and 2000s coincided with significant national recessions.

Real personal income outpaced employment growth, which in turn outstripped population growth.

Growth Compared to the U.S.

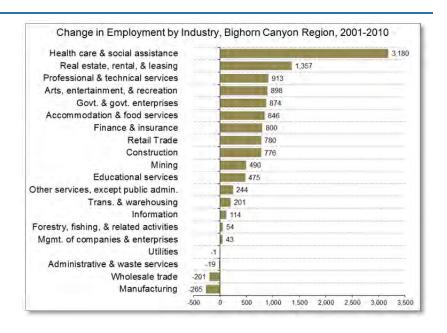
Like many counties near National Park units, the Bighorn Canyon region outpaced the U.S. in standard measures of growth from 1970 to 2010.

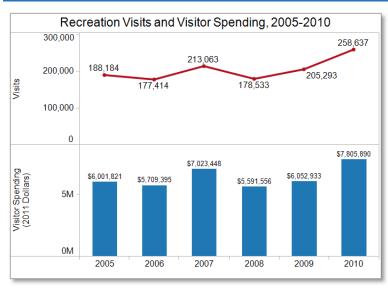
The region's population grew by 63 percent (vs. 52% for the U.S.), real personal income grew by 188 percent (vs. 164% for the U.S.), and employment grew by 138 percent (vs. 90% for the U.S.) from 1970 to 2010.

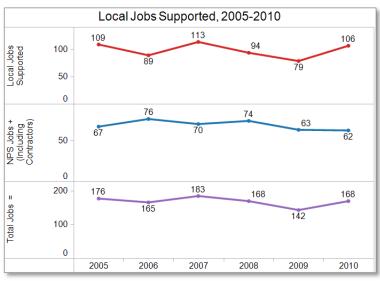
The regional economy (Bighorn, Carbon, and Yellowstone counties) created 12,045 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in services industries and most were in relatively high-wage sectors such as health care, real estate, and professional and technical services.

The biggest job losses were in manufacturing.







Economic Impact of Bighorn Canyon NRA

In 2010, there were 258,637 NRA visits, which resulted in nearly \$8 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 168 jobs directly associated with the NRA. This includes 106 local jobs and 62 National Park Service jobs.

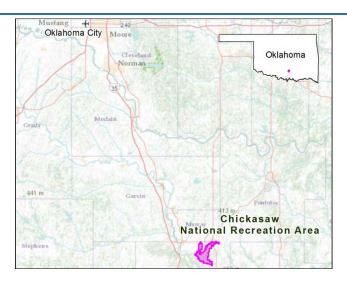
For more information on the economic impact of NRAs, see:

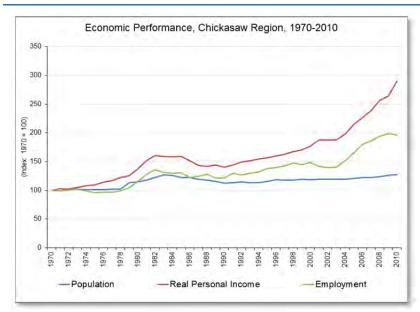
http://headwaterseconomics.org/headwaters/economic-impact-of-national-parks/

Chickasaw National Recreation Area

Key Facts:

- Chickasaw NRA was established in 1902 and encompasses 9,877 acres. http://www.nps.gov/chic/index.htm
- Nearby cities with an airport: Oklahoma City, OK (pop. 579,999).
- Counties included in this analysis: Murray, OK.

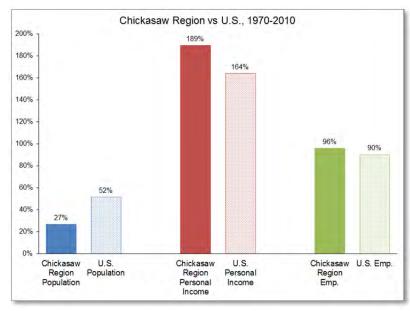




Long-Term Growth Trends

The Chickasaw region grew in the 1970s, declined in the 1980s, and experienced growth again in the 1990s, which accelerated in the 2000s.

Real personal income outpaced employment growth, which in turn outstripped population growth.



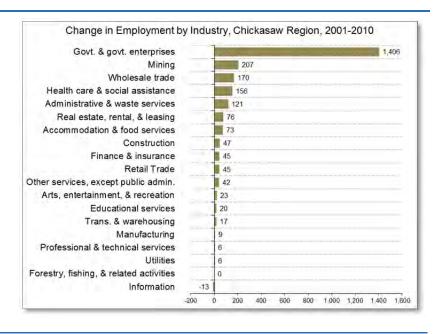
Growth Compared to the U.S.

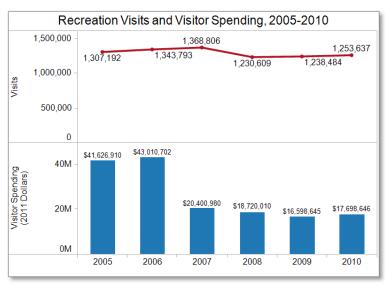
Unlike many counties near National Park units, the Chickasaw region did not outpace the U.S. across the board in standard measures of growth from 1970 to 2010.

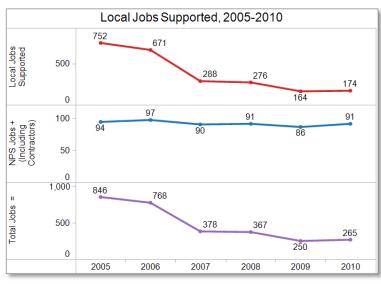
The region's population grew by 27 percent (vs. 52% for the U.S.), real personal income grew by 189 percent (vs. 164% for the U.S.), and employment grew by 96 percent (vs. 90% for the U.S.) from 1970 to 2010.

The regional economy (Murray County) created 2,469 jobs from 2001 to 2010.

Most new jobs were in government, followed by mining. There were no significant job losses, though information services contracted by a small margin.







Economic Impact of Chickasaw NRA

In 2010, there were 1,253,637 NRA visits, which resulted in more than \$17 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 265 jobs directly associated with the NRA. This includes 174 local jobs and 91 National Park Service jobs.

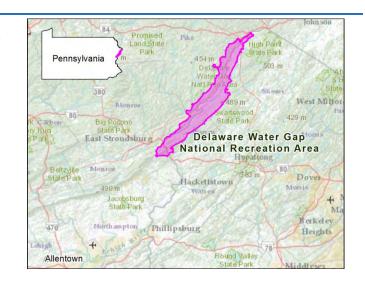
For more information on the economic impact of NRAs, see:

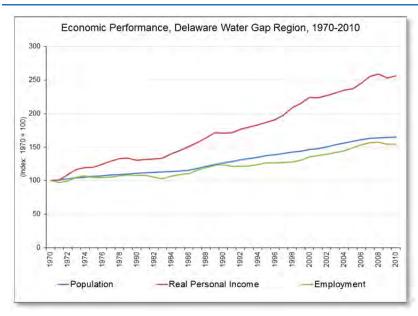
http://headwaterseconomics.org/headwaters/economic-impact-of-national-parks/

Delaware Water Gap National Recreation Area

Key Facts:

- Delaware Water Gap NRA was established in 1965 and encompasses 68,608 acres.
 - http://www.nps.gov/dewa/index.htm
- Nearby cities with an airport: Allentown, PA (pop. 118,032).
- Counties included in this analysis: Monroe, Northampton, and Warren, PA.





Delaware Water Gap Region vs U.S., 1970-2010 180% 156% 160% 140% 120% 100% 90% 80% 60% 54% 52% 40% 20% U.S. Emp. Delaware US Delaware US Delaware Water Gap Population Water Gap Persona Water Gap Region Region Region Population Personal Income

Long-Term Growth Trends

The Delaware Water Gap region grew steadily during the four decades from 1970 to 2010.

There were modest declines in the early 1980s and late 2000s coinciding with significant national recessions.

Real personal income outpaced population growth, which in turn outstripped employment growth.

Growth Compared to the U.S.

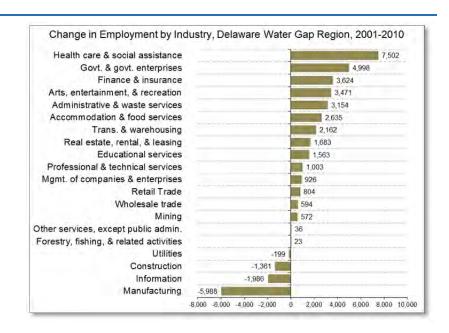
Unlike many counties near National Park units, the Delaware Water Gap region did not outpace the U.S. across the board in standard measures of growth from 1970 to 2010.

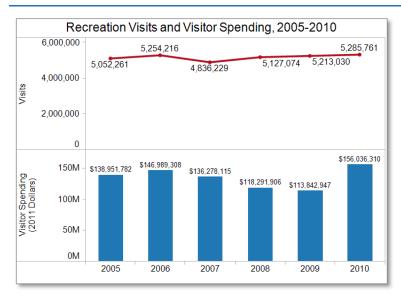
The region's population grew by 65 percent (vs. 52% for the U.S.), real personal income grew by 156 percent (vs. 164% for the U.S.), and employment grew by 54 percent (vs. 90% for the U.S.) from 1970 to 2010.

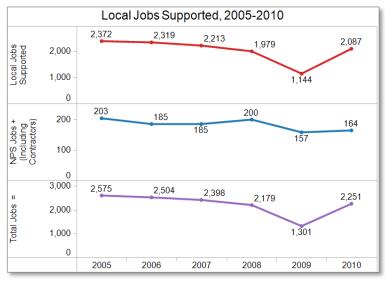
The regional economy (Monroe, Northampton, and Warren counties) created 34,750 jobs across a range of industries from 2001 to 2010.

Nearly all new jobs were in services industries and government, and most were in relatively high-wage sectors such as health care, finance, and insurance.

The biggest job losses were in manufacturing, followed by information services.







Economic Impact of Delaware Water Gap NRA

In 2010, there were 5,285,761 NRA visits, which resulted in \$156 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 2,251 jobs directly associated with the NRA. This includes 2,087 local jobs and 164 National Park Service jobs.

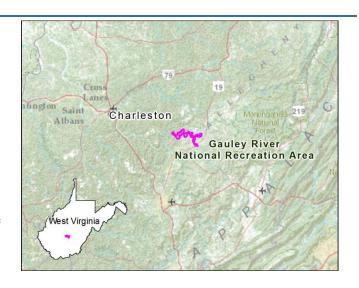
For more information on the economic impact of NRAs, see:

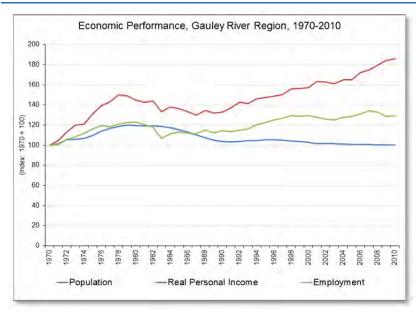
http://headwaterseconomics.org/headwaters/economic-impact-of-national-parks/

Gauley River National Recreation Area

Key Facts:

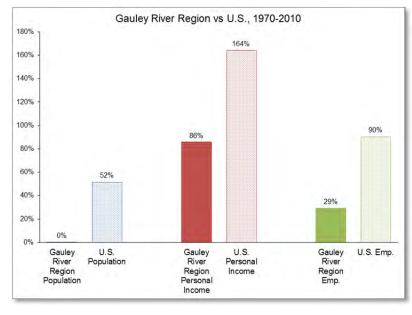
- Gauley River NRA was established in 1988 and encompasses 11,158 acres. http://www.nps.gov/gari/index.htm
- Nearby cities with an airport: Charleston, WV (pop. 51,400).
- Counties included in this analysis: Fayette and Nicholas, WV.





Long-Term Growth Trends

The Gauley River region grew rapidly in the early 1970s, struggled in the later 1970s and through the 1980s, and has grown modestly since 1990—unlike real personal income and employment, population has not recovered from a peak in the late 1970s.



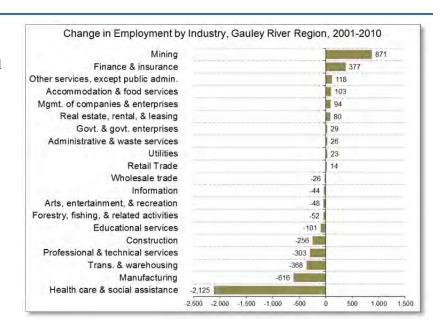
Growth Compared to the U.S.

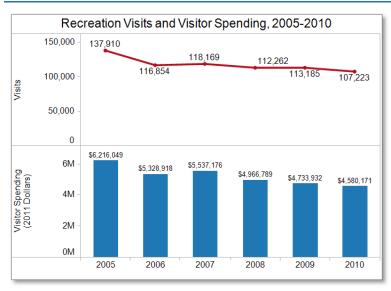
Unlike many counties near National Park units, the Gauley River region did not outpace the U.S. in standard measures of growth from 1970 to 2010.

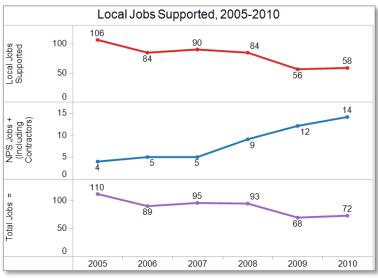
The region's population grew by 0% percent (vs. 52% for the U.S.), real personal income grew by 86 percent (vs. 164% for the U.S.), and employment grew by 29 percent (vs. 90% for the U.S.) from 1970 to 2010.

The regional economy (Fayette and Nicholas counties) created 1,735 jobs across a range of industries from 2001 to 2010. Most new jobs were in mining, followed by finance and insurance.

In net terms, the region lost 2,204 jobs. Health care and manufacturing industries led job losses.







Economic Impact of Gauley River NRA

In 2010, there were 107,223 NRA visits, which resulted in \$4.5 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 72 jobs directly associated with the NRA. This includes 58 local jobs and 14 National Park Service jobs.

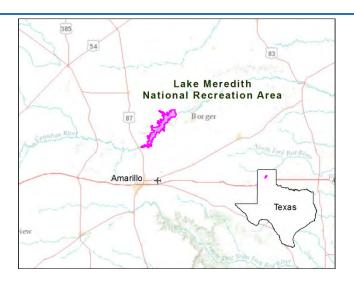
For more information on the economic impact of NRAs, see:

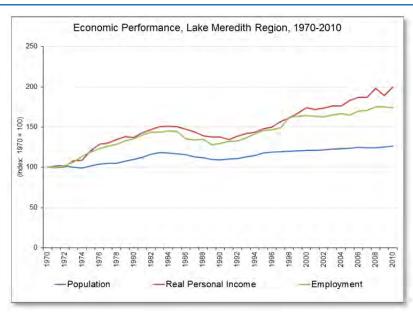
http://headwaterseconomics.org/headwaters/economic-impact-of-national-parks/

Lake Meredith National Recreation Area

Key Facts:

- Lake Meredith NRA was established in 1990 and encompasses 41,627 acres. http://www.nps.gov/lamr/index.htm
- Nearby cities with an airport: Amarillo, TX (pop. 190,695).
- Counties included in this analysis: Carson, Hutchison, Moore, and Potter, TX.

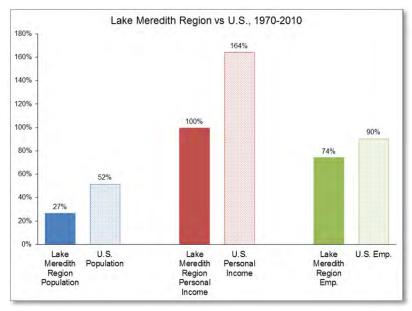




Long-Term Growth Trends

The Lake Meredith region grew steadily during the four decades from 1970 to 2010—except for the 1980s, which was characterized by declines.

Real personal income outpaced employment growth, which in turn outstripped population growth.



Growth Compared to the U.S.

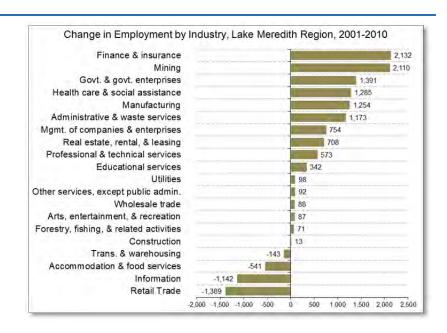
Unlike many counties near National Park units, the Lake Meredith region did not outpace the U.S. in standard measures of growth from 1970 to 2010.

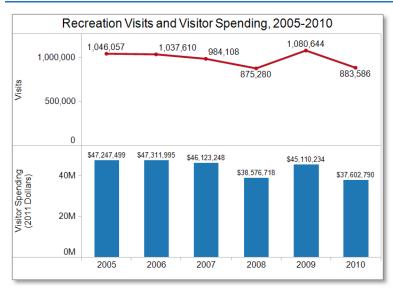
The region's population grew by 27 percent (vs. 52% for the U.S.), real personal income grew by 100 percent (vs. 164% for the U.S.), and employment grew by 74 percent (vs. 90% for the U.S.) from 1970 to 2010.

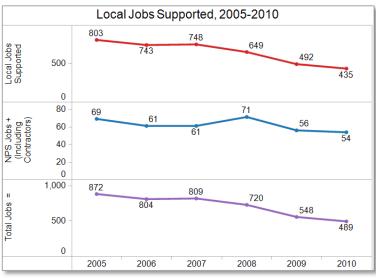
The regional economy (Carson, Hutchison, Moore, and Potter counties) created 12,171 jobs across a range of industries from 2001 to 2010.

The majority of new jobs came from a mix of services industries, such as finance and insurance, and non-services industries, such as mining.

The biggest job losses were in retail trade, followed by information services.







Economic Impact of Lake Meredith NRA

In 2010, there were 883,586 NRA visits, which resulted in more than \$37 million in spending on hotels, restaurants, transportation, guides, etc.

These expenditures supported 489 jobs directly associated with the NRA. This includes 435 local jobs and 54 National Park Service jobs.

For more information on the economic impact of NRAs, see:

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

