

A Research Paper by



National Monuments Redesignated as National Parks

Insights for White Sands National Monument



May 2018

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ABOUT HEADWATERS ECONOMICS

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

CONTACT INFORMATION

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



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

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I. EXECUTIVE SUMMARY

Proposals have been made to redesignate the White Sands National Monument in New Mexico as a National Park. The Monument today is managed by the National Park Service (NPS). The proposed redesignation would maintain these lands as units of the National Park system. This report investigates the potential economic effects of redesignating National Monuments as National Parks and, more specifically, sheds light on the potential economic effects of converting the White Sands National Monument to a National Park.

Depending on how local communities advertise a new National Park, a redesignation of White Sands may result in between \$6.2 million and \$7.5 million in new spending, 84-107 new jobs, and between \$2.7 million and \$3.3 million in labor income.

We examined eight National Parks that had been redesignated from National Monuments and found that, on average, visits are 21 percent larger five years after redesignation compared to five years before. However, there is significant variability between case studies. In some instances, there was already long-term growth in recreation visits during the time that the unit was a National Monument. In others, visitation is affected by external issues such as national recessions (for example, in Death Valley National Park).

The period from 2013 to 2016 was remarkable for the National Park Service. Visitation to National Parks accelerated rapidly since the end of the Great Recession. From 2013 to 2016, visitation to National Parks has increased nationally by 21 percent and in each of the case studies profiled visitation also rose rapidly during this period, resulting in visitor spending and the creation of local jobs. We can expect the growth trend to continue as long as the national economy continues to grow.

We also discovered that National Parks, on average, have much greater visitation, overnight visits, spending per visitor, and economic impacts than National Monuments. In the Intermountain West, we found that from 2000 to 2016 recreation visits to National Parks increased while visits to National Monuments decreased. Importantly, National Parks saw a much faster rise in overnight visits to the region.

There is potential for economic benefits from redesignating a National Monument as a National Park. Currently, most National Monuments are not overnight destinations, substantially lessening their economic impact. Increases in visitor spending may be attained by attracting people for longer visits, more overnight visits, more guided tours, and more concession-related spending in a Park or adjacent community. New tourist-supporting infrastructure such as lodging, restaurants, and tours could help adjacent communities better capitalize on these places as economic assets.

It is possible that there is something to the National Park brand and identity that National Monuments do not share, at least not to the same extent. National Parks, for example, can be sources of pride for communities, who become actively involved in promoting more visitation.

The timing may be advantageous to designate a new National Park in New Mexico. Visitation to National Parks has risen rapidly, in part due to the National Park Service centennial celebrations in 2016, and as a result of numerous national promotional efforts. Communities surrounding White Sands may benefit from an increase in visitation, in particular overnight visitation, that is common with National Parks.

II. INTRODUCTION

National Monuments differ from National Parks in a variety of ways¹, and a proposal is being considered to redesignate the White Sands National Monument in New Mexico as a National Park. The Monument is managed by the National Park Service (NPS). The proposed redesignation would maintain these lands as units of the National Park system.

The purpose of this report is to investigate the potential economic effects when National Monuments are redesignated as National Parks and, more specifically, to shed light on the potential economic effects of converting the White Sands National Monument to a National Park.

White Sands National Monument is located in Dona Ana and Otero counties, New Mexico. The closest communities are Alamogordo (population 31,283) and Las Cruces (101,759). It is also adjacent to the Holloman Air Force Base and White Sands Missile Range. The Monument is known for its glistening white dunes, made up of the world's largest gypsum dunefield, that rise over 60 feet and cover 275 square miles. It is 143,733 acres in size.²

III. METHODS

We use two approaches to evaluate the effect of redesignating National Monuments: individual case studies of specific units and an aggregate analysis identifying trends in visitation and economic impacts.

Case Studies

For the case studies, we selected eight National Parks for comparison based on the following criteria:

1. National Park units redesignated from National Monuments;
2. Located in the 11 contiguous western states; and
3. Redesignated since 1970.

Throughout this report we describe these units as “peers.”

For each unit we review:

- Long-term trends in visitation before and after redesignation; and
- The economic impacts resulting from visitation to the National Park.

Aggregate Analysis

We look across park units to determine what we can learn about the differences in visitation and spending both between National Monuments and National Parks, and within the peer units before and after redesignation. We review the data to identify:

- Differences in the growth of recreation and overnight visits between National Monuments and National Parks;
- Differences in spending between all National Monuments and all National Parks;
- Differences in the type of visitation, such as changes in overnight visits, between National Monuments and National Parks;
- Differences in visitation and spending between New Mexico National Parks and National Monuments and White Sands National Monuments; and
- Differences in visitation between the five years before redesignation and the five years after redesignation for the peer units.

Data Sources

All park visitation data are from the National Park Service’s Annual Visitation report for years 1979-2016.³ Estimates of visitor spending and economic impacts by unit are from the 2017 National Park Visitor Spending Effects report, which reports several measures of economic performance annually for 2012-2016.⁴

IV. CASE STUDIES

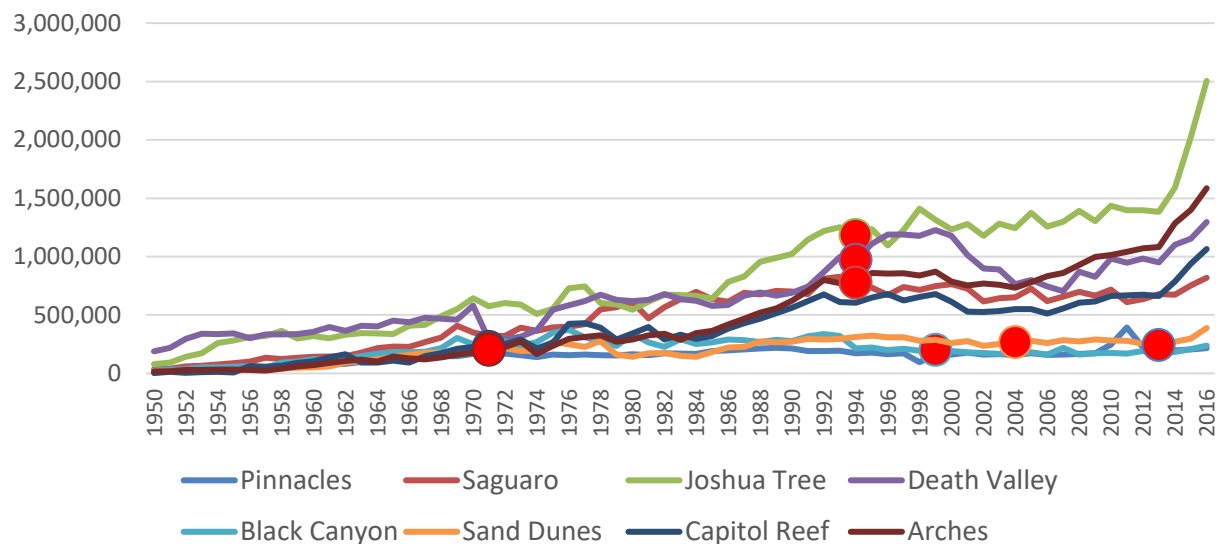
For each case study we show long-term trends in recreation visitors and the economic impact from visitors from 2013-2016 (the only dates for which this data is available). Table 1 lists the National Parks that we included in the case studies and peer analysis.

Table 1. Peer National Park Units that Were Redesignated as National Monuments.

National Park Name	State	Date of Redesignation	Size (acres)	Associated Counties
Arches NP	Utah	1971	76,678	Grand
Black Canyon of the Gunnison NP	Colorado	1999	30,749	Montrose
Capitol Reef NP	Utah	1971	241,904	Wayne
Death Valley NP	California	1994	3,373,063	Inyo
Great Sand Dunes NP and Preserve	Colorado	2004	107,301 NP + 41,686 Preserve	Alamosa and Saguache
Joshua Tree NP	California	1994	790,635	Riverside and San Bernadino
Pinnacles NP	California	2013	26,685	San Benito and Monterey
Saguaro NP	Arizona	1994	91,442	Pima
Proposed for Redesignation				
White Sands National Monument	New Mexico		143,733	Dona Ana and Otero

Visitation across the National Park Service has been trending upward for decades. Figure 1 shows the long-term trends in visitation for the eight peer units.

Figure 1. Recreation Visitation to Eight National Park Service Units. Red Dot Indicates Time of Redesignation from National Monument to National Park.



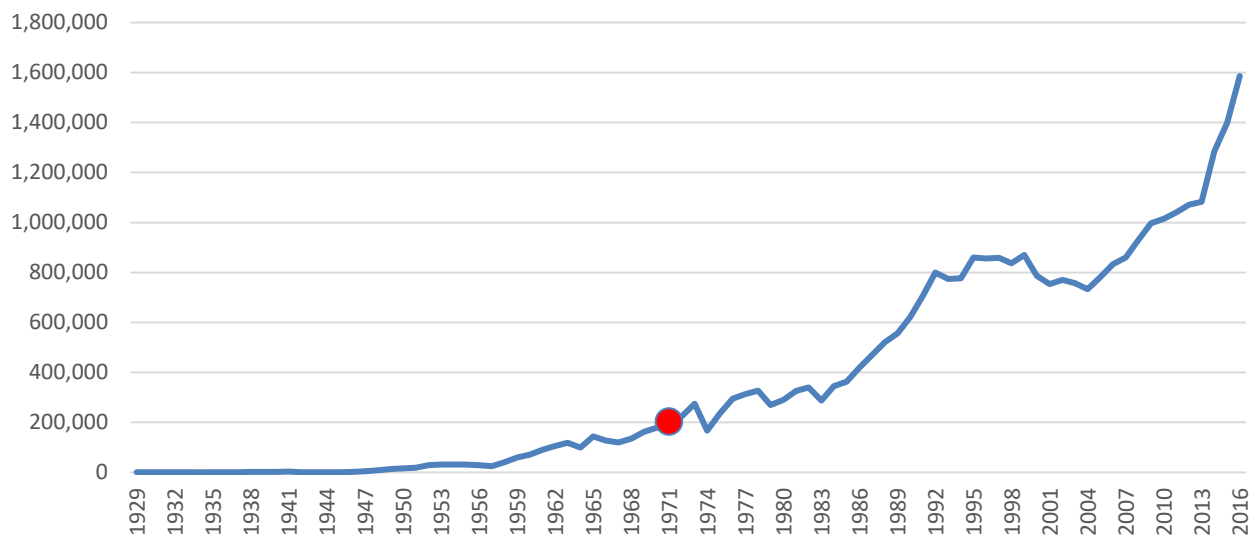
Arches National Park

Redesignated as a National Park in 1971
Annual budget (FY16): \$1,972,000

“The park has extraordinary products of erosion in the form of some 2,000 arches, windows, pinnacles, and pedestals. Proclaimed a national monument April 12, 1929; redesignated Nov. 12, 1971. Boundary changes: Nov. 25, 1938; July 22, 1960; Jan. 20, 1969; Oct. 30, 1998. Acreage—76,678.98 Federal: 76,545.95 Nonfederal: 133.03.” *From NPS’s National Parks: Index 1916-2016.*

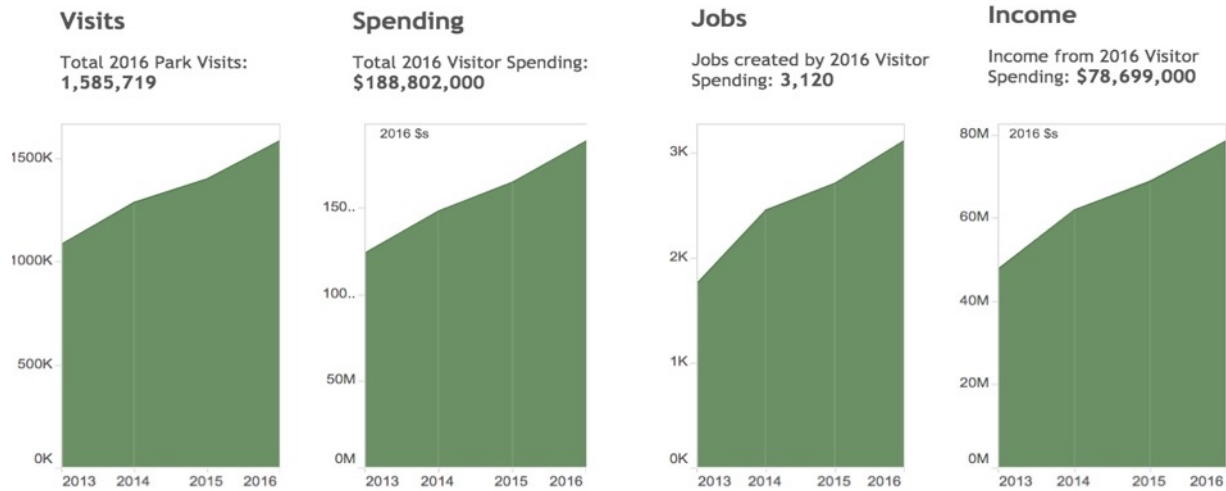


Figure 2. Recreation Visitation to Arches National Park, Before and After Redesignation from National Monument. Redesignated in 1971.



In the 10 years before the National Monument was redesignated as a National Park, the average annual visitation was 128,320. In the 45 years after conversion to a National Park, the visitation increased to an average of 681,407 visitors per year, a 431 percent increase. Since 2013, visitation has increased by 46 percent. As with most case studies, visitation declined during the 2007-2009 recession.

Figure 3. Jobs and Income Created by Visitor Spending in Arches National Park.



Spending from more than 1.5 million visitors in 2016 resulted in 3,120 local jobs and almost \$79 million in labor income, a rapidly rising trend since 2013.

Black Canyon of the Gunnison National Park

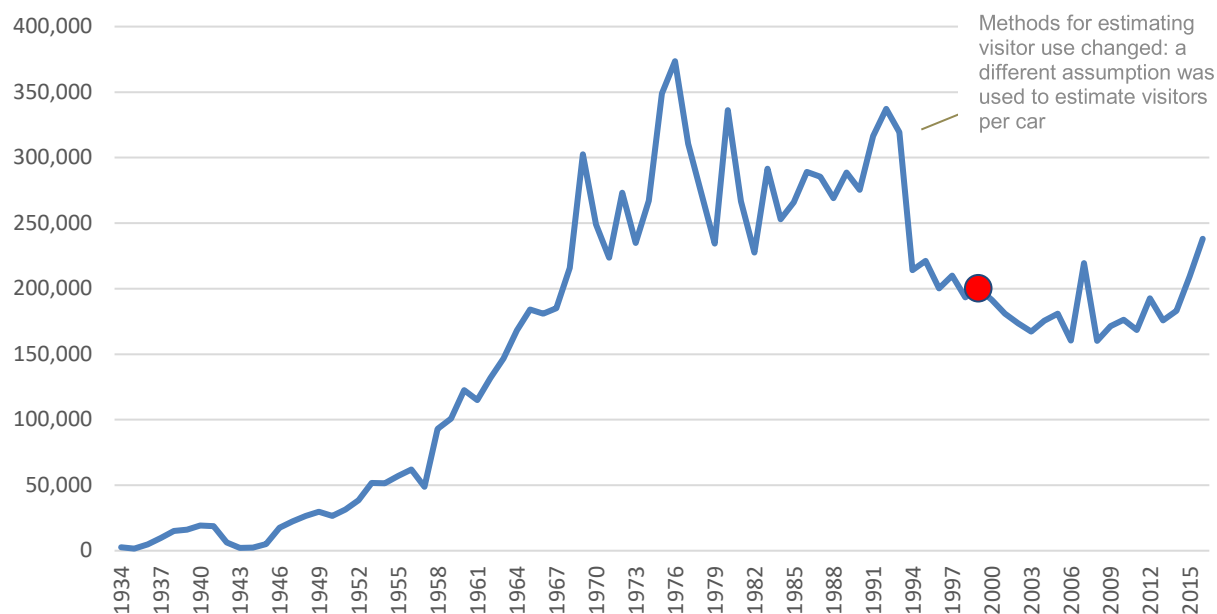
Redesignated as a National Park in 1999

Annual budget (FY16): \$1,905,000

“Over the past two million years, the Gunnison River, along with the forces of weathering, has sculpted this vertical wilderness of rock, water, and sky. The Painted Wall, a sheer drop of 2,250 feet, is the highest cliff in Colorado. Proclaimed a national monument March 2, 1933; redesignated as a national park Oct. 21, 1999. Boundary changes: May 16, 1938; Oct. 28, 1939; April 13, 1960; July 13, 1984; Oct. 21, 1999; Nov. 11, 2003. Wilderness designated Oct. 20, 1976; Oct. 21, 1999. Acreage—30,749.75 Federal: 30,637.25 Nonfederal: 112.50 Wilderness area: 15,599.” *From NPS’s National Parks: Index 1916-2016.*

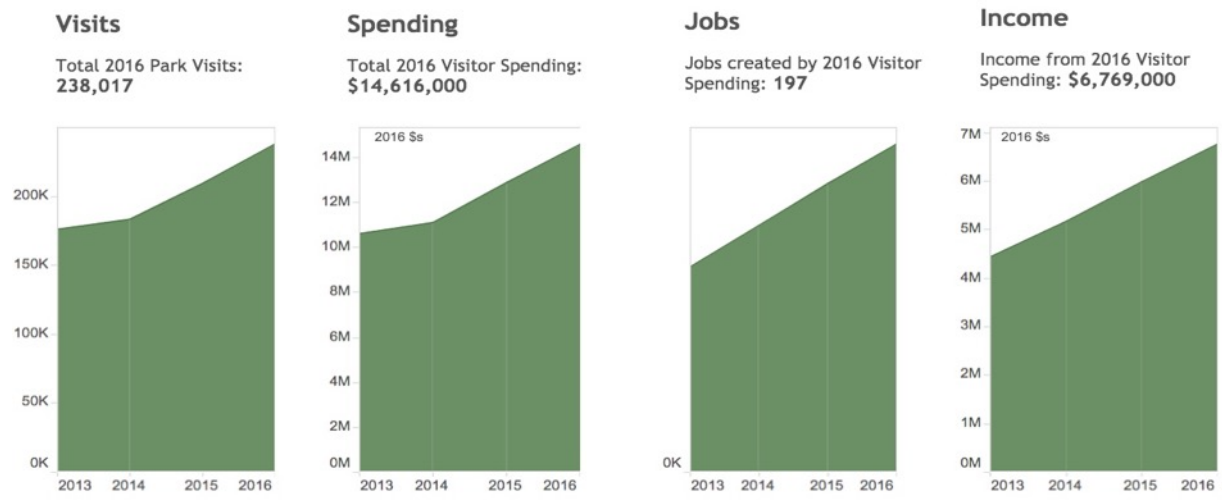


Figure 4. Recreation Visitation to Black Canyon of the Gunnison National Park, Before and After Redesignation from National Monument. Redesignated in 1999.



Five years before redesignation, annual visits averaged 204,939. After redesignation, visitation averaged 177,808, a 13 percent decline. Park officials attribute this visitation decline in large part to drought and many wildfires burning in the state, which discouraged tourism. Much of the increase in visitation occurred since 2009 at the end of the Great Recession. Comparisons to historic visitation are not valid for this unit because beginning in 1992 the Park changed the way it counted visitors, making a different assumption about the number of people per car.

Figure 5. Jobs and Income Created by Visitor Spending in Black Canyon of the Gunnison National Park.



A rise in visitation from 2013 to 2016 resulted in increased visitor spending, which in turn resulted in a growth in jobs and labor income.

Capitol Reef National Park

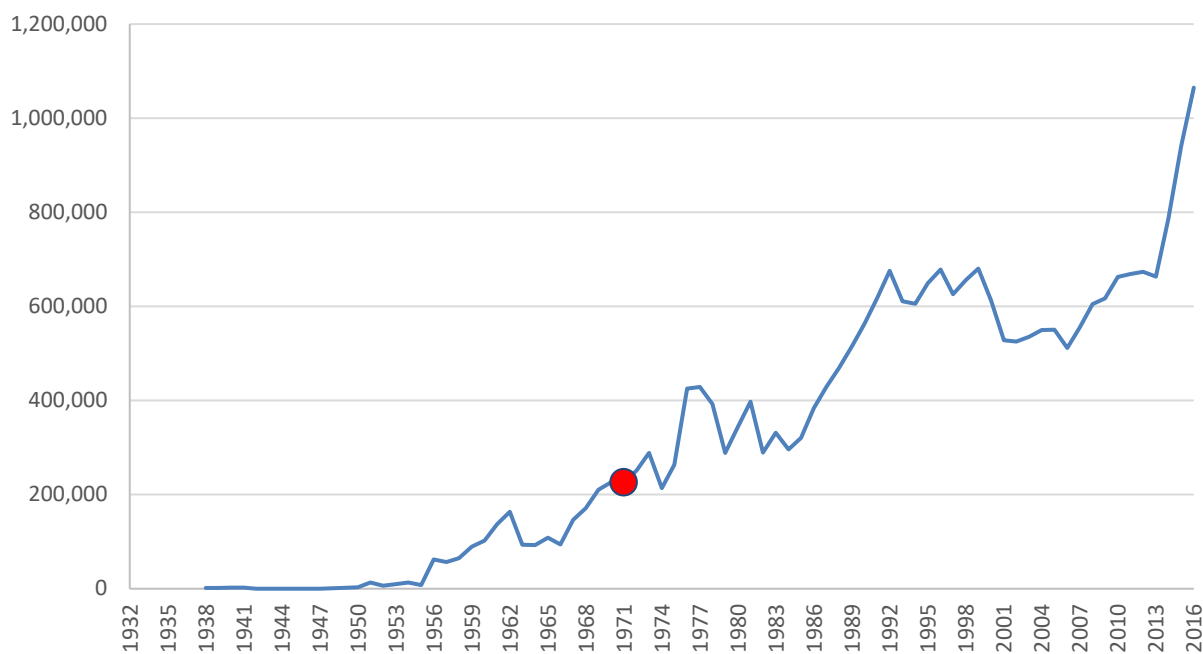
Redesignated as a National Park in 1971

Annual budget (FY16): \$2,397,000

“Capitol Reef preserves over 70 miles of the Waterpocket Fold, a geologic uplift featuring colorful sedimentary layers formed by erosion into a labyrinth of cliffs and canyons. Towering domes of white sandstone account for the name. Archaeological evidence of prehistoric cultures and a historic Mormon pioneer settlement are also preserved. Proclaimed a national monument Aug. 2, 1937; redesignated a national park Dec. 18, 1971. Boundary changes: July 2, 1958; Jan. 20, 1969; Dec. 18, 1971. Designated an International Dark Sky Park 2015. Acreage—241,904.26 Federal: 241,234.29 Nonfederal: 669.97.” *From NPS’s National Parks: Index 1916-2016.*

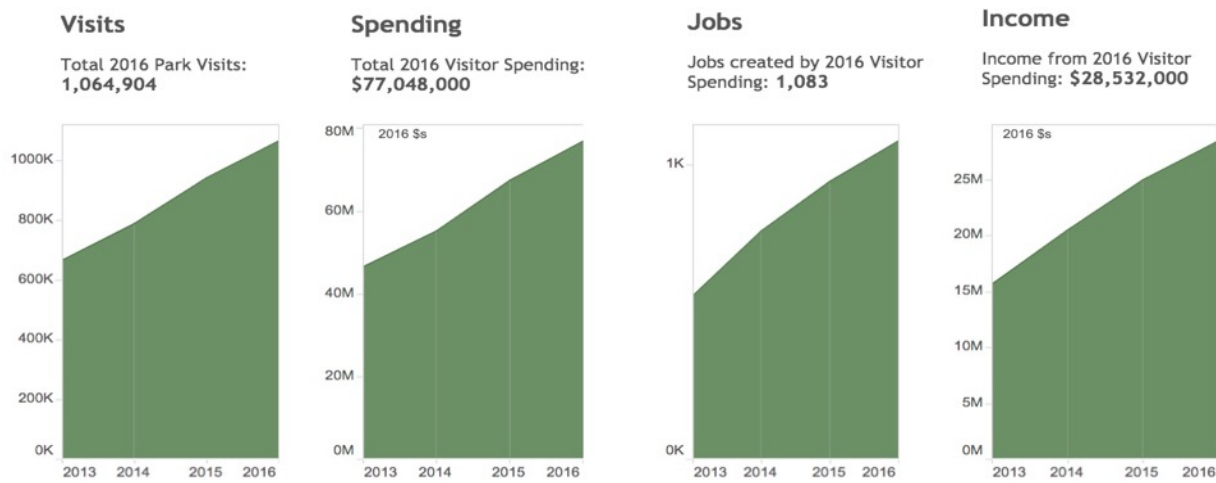


Figure 6. Recreation Visitation to Capitol Reef National Park, Before and After Redesignation from National Monument. Redesignated in 1971.



Before this unit was redesignated, visitation was already on the rise. Visitation has slowed down periodically, corresponding with periods of national recession. In the 10 years before the National Monument was redesignated as a National Park, the average annual visitation was 144,260. In the 45 years after conversion to a National Park, the visitation increased to an average of 527,568 visitors per year, a 266 percent increase. Since 2013 visitation has shot up 60 percent.

Figure 7. Jobs and Income Created by Visitor Spending in Capitol Reef National Park.



The rapid rise in visitation and visitors' spending since 2013 has resulted in a growth in jobs and labor income.

Death Valley National Park

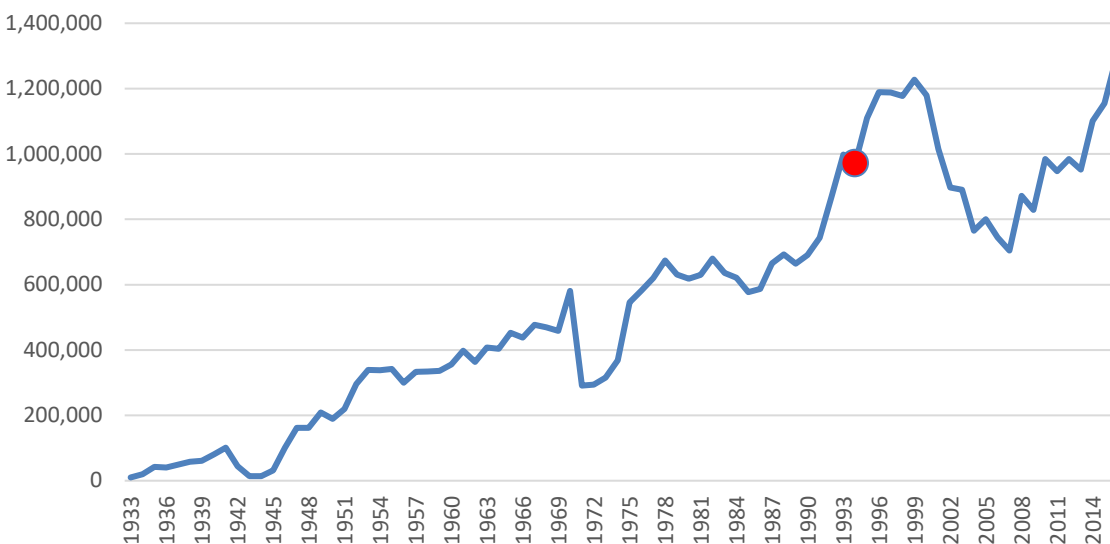
Redesignated as a National Park in 1994

Annual budget (FY16): \$8,885,000

“The largest national park in the lower 48 states, this desert park contains mountain ranges, sand dunes, dry lake playas, and many desert springs. It is the lowest point in North America and holds the record for the hottest temperature ever recorded. The area includes Scotty’s Castle, a Spanish Mediterranean mansion containing many innovative design features for its time (1930s), the grandiose home of a famous prospector, and other features remnants of gold and borax mining. Proclaimed a national monument Feb. 11, 1933; redesignated as a national park Oct. 31, 1994. Boundary changes: March 26, 1937; Jan. 17, 1952; Oct. 31, 1994. Designated a Biosphere Reserve 1984. Wilderness designated Oct. 31, 1994. Acreage—3,373,063.14 Federal: 3,321,159.32 Nonfederal: 51,903.82.” *From NPS’s National Parks: Index 1916-2016.*

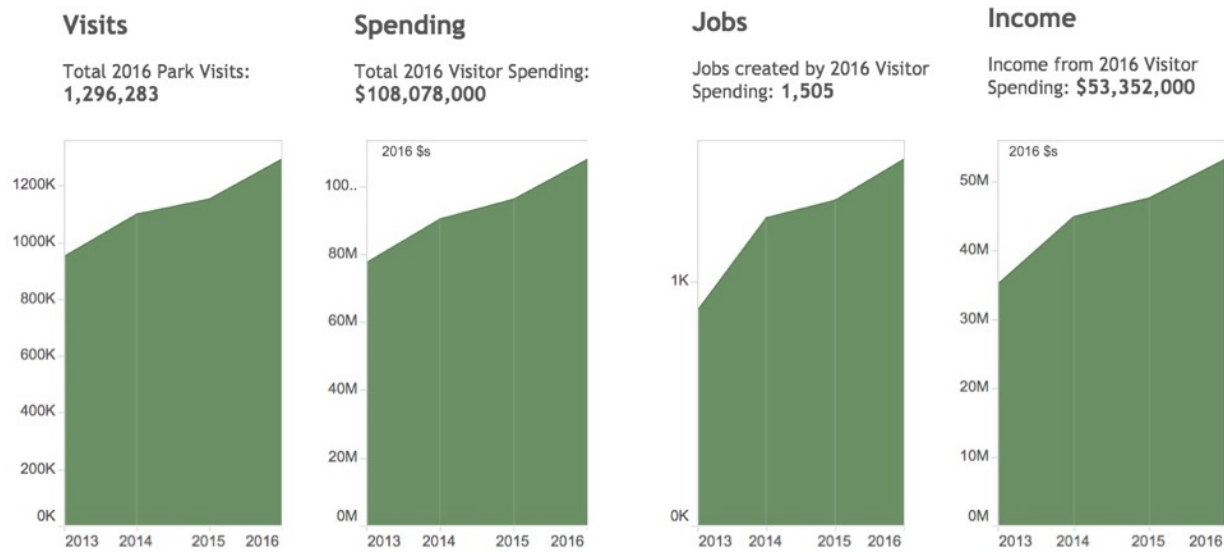


Figure 8: Recreation Visitation to Death Valley National Park, Before and After Redesignation from National Monument. Redesignated in 1994.



While the unit was a National Monument, recreation visitation was already rising long-term. In the five years before the National Monument was redesignated as a National Park, the average annual visitation was 854,743. In the five years after conversion to a National Park, the visitation increased to an average of 1,178,435 visitors per year, a 38 percent increase. Visitation dropped during the Great Recession, but has since exceeded its pre-recession peak in 1999.

Figure 9. Jobs and Income Created by Visitor Spending in Death Valley National Park.



Visitation rose rapidly from 2013 to 2016 resulting in increased visitor spending, which in turn resulted in a growth in jobs and labor income.

Great Sand Dunes National Park and Preserve

Redesignated as a National Park in 2000; officially established as a National Park in 2004
Annual budget (FY16): \$2,344,000

“The tallest in North America, these dunes developed as southwesterly winds blew ancient alluvial sediments from the San Luis Valley toward the Sangre de Cristo Mountains. Proclaimed a national monument March 17, 1932. Boundary changes: March 12, 1946; June 7, 1956; Nov. 10, 1978. Boundary change/redesignation as a national park and national preserve Nov. 22, 2000. Established Sept. 24, 2004. Wilderness designated Oct. 20, 1976; Aug. 13, 1993. Acreage—National Park: 107,301.87 Federal: 94,687.84 Nonfederal: 12,614.03 National Preserve: 41,686.00, all Federal Wilderness area: 75,225.”
From NPS’s National Parks: Index 1916-2016.

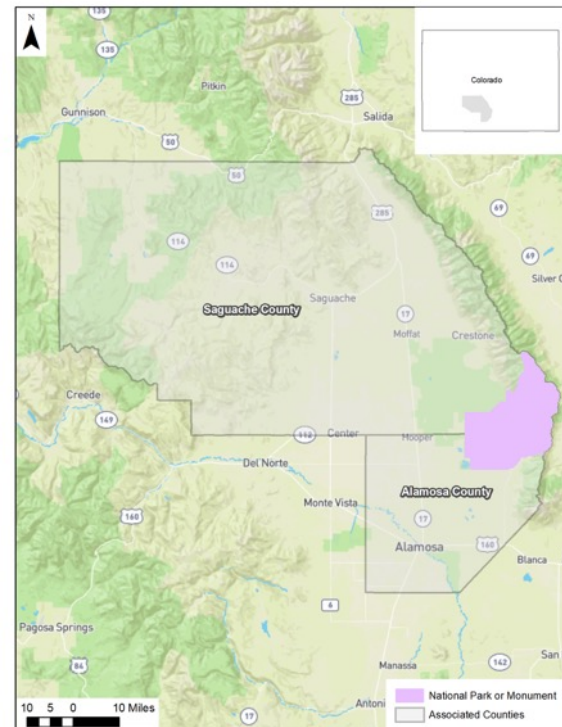
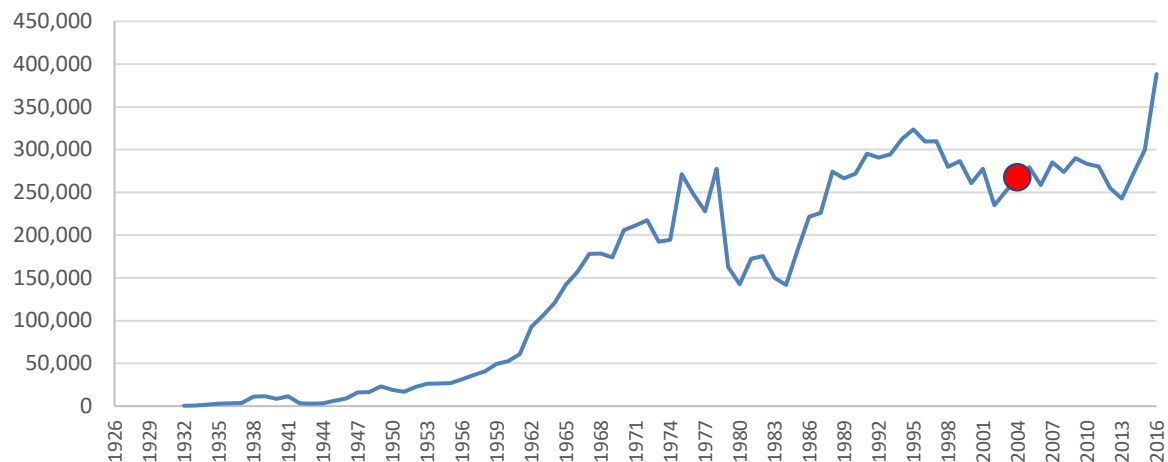


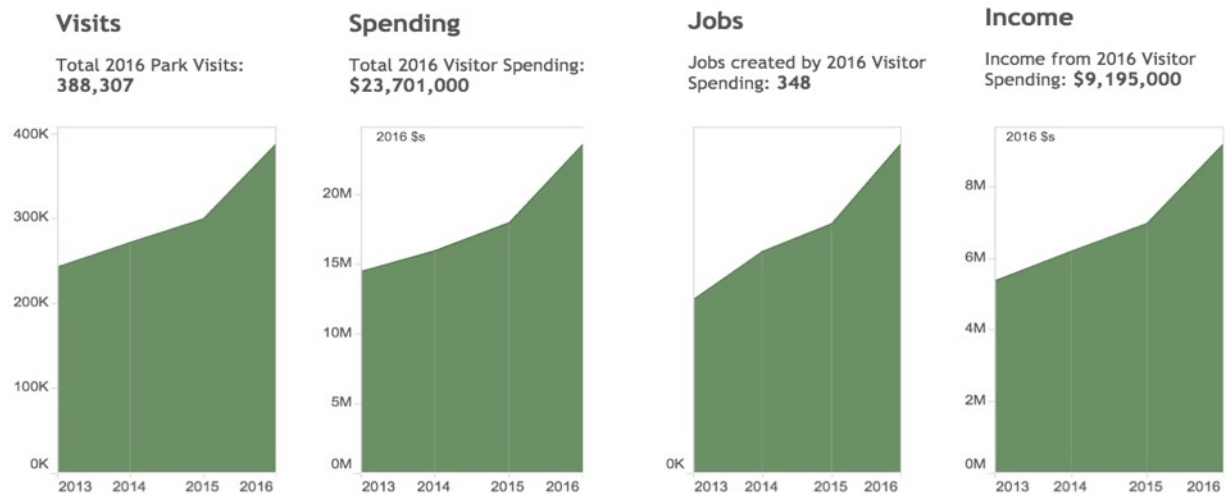
Figure 10. Recreation Visitation to Great Sand Dunes National Park and Preserve, Before and After Establishment as a National Park. Redesignated in 2000, established in 2004.¹



With the exception of a recession period in the early 1980s, the long-term trajectory in recreation visits was upward during the time the unit was a National Monument. In the five years before the National Monument was established as a National Park, the average annual visitation was 258,333. In the five years after establishment as a National Park, the visitation increased to an average of 277,446 visitors per year, a seven percent increase. However, by 2016 visitation shot up to 388,308, a 60 percent increase from 2013.

¹ Great Sand Dunes is unique in that there was a lag between when the unit was redesignated as a National Park in 2000 and when it began operating as a National Park in 2004, due to a need to acquire additional land nearby. For this analysis we use 2004 as the transition date.

Figure 11. Jobs and Income Created by Visitor Spending in Great Sand Dunes National Park and Preserve.



A rapid rise in visitation since 2013 resulted in increased visitor spending, which in turn resulted in a growth in jobs and labor income. Notably, visitations, expenditures, and resulting economic impacts for this unit accelerated even faster from 2015 to 2016.

Joshua Tree National Park

Redesignated as a National Park in 1994
Annual budget (FY16): \$6,245,000

“A representative stand of Joshua trees and a great variety of plants and animals exist in this desert region. Proclaimed a national monument Aug. 10, 1936; redesignated Oct. 31, 1994. Boundary changes: Sept. 25, 1950; June 30, 1961; Oct. 31, 1994. Wilderness designated Oct. 20, 1976. Designated a Biosphere Reserve 1984. Acreage—790,635.74 Federal: 779,188.51 Nonfederal: 11,447.23. Wilderness area: 429,690.” *From NPS’s National Parks: Index 1916-2016.*

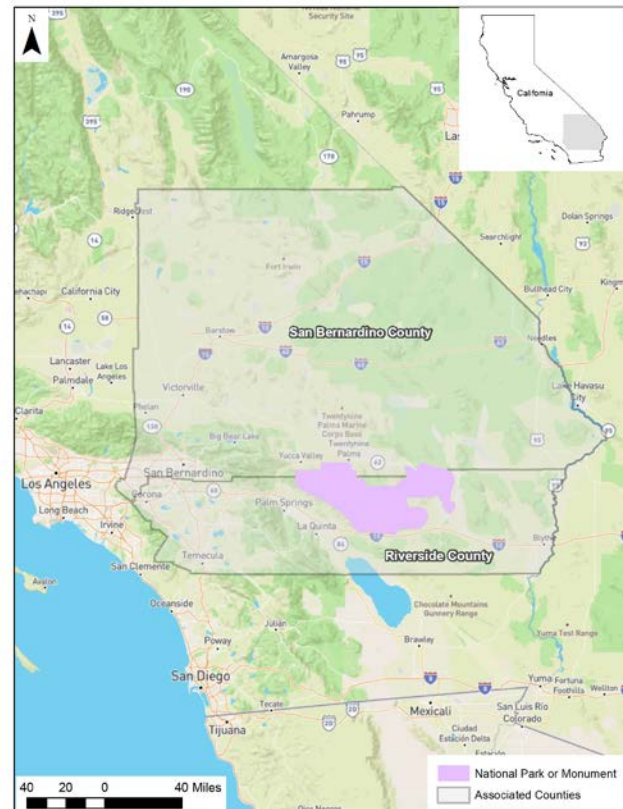
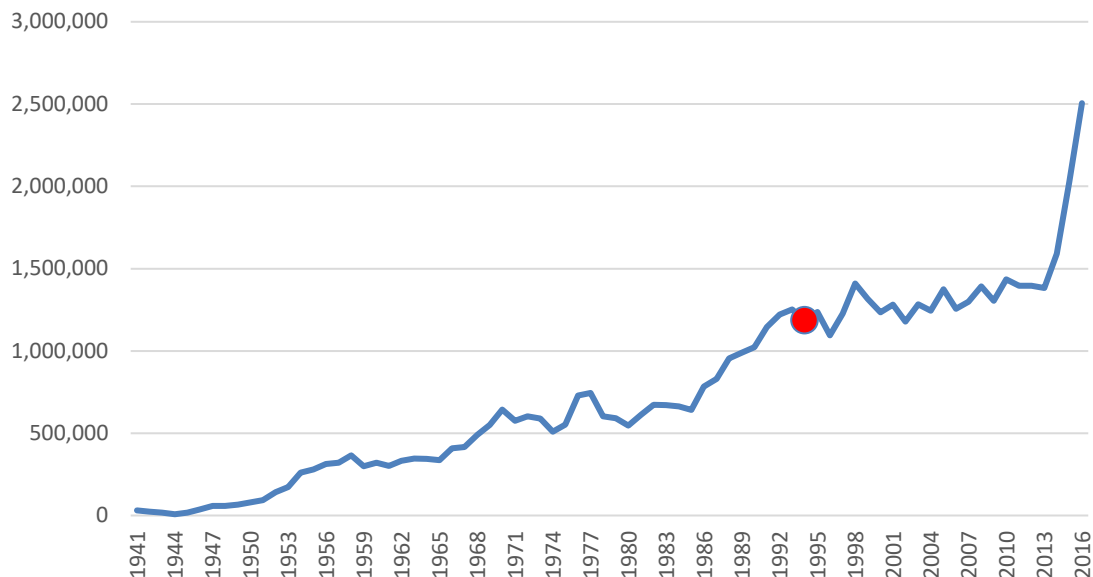


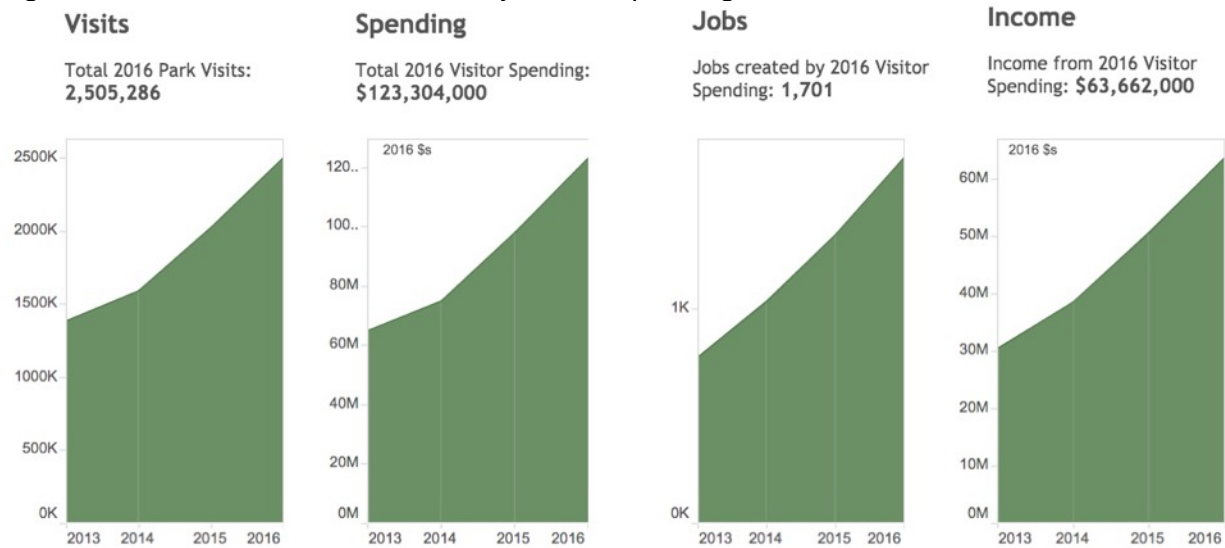
Figure 12. Recreation Visitation to Joshua Tree National Park, Before and After Redesignation from National Monument. Redesignated in 1994.



During the time that it was a National Monument, the unit experienced long-term continued growth in recreation visitors. In the 21 years before the National Monument was redesignated as a National Park, the average annual visitation was 777,461. In the 21 years after conversion to a National Park, the

visitation increased to an average of 1,402,861 visitors per year, an 80 percent increase. The majority of the growth occurred from 2013 to 2016.

Figure 13. Jobs and Income Created by Visitor Spending in Joshua Tree National Park.



The rapid rise in visitation from 2013 to 2016 resulted in more expenditure by visitors in the local economy, which in turn increased jobs and labor income.

Pinnacles National Park

Redesignated as a National Park in 2013

Annual budget (FY16): \$3,582,000

“Spire-like rock formations 500 to 1,200 feet high, with caves and a variety of volcanic features, rise above the smooth contours of the surrounding countryside. Proclaimed a national monument Jan. 16, 1908; redesignated as national park Jan. 10, 2013. Boundary changes: May 7, 1923; July 2, 1924; April 13, 1931; July 11, 1933; Dec. 5, 1941; Oct. 20, 1976; Jan. 11, 2000. Wilderness designated Oct. 20, 1976. Acreage—26,685.73 Federal: 26,634.29 Nonfederal: 51.44. Wilderness area: 16,048.”

From NPS’s National Parks: Index 1916-2016.

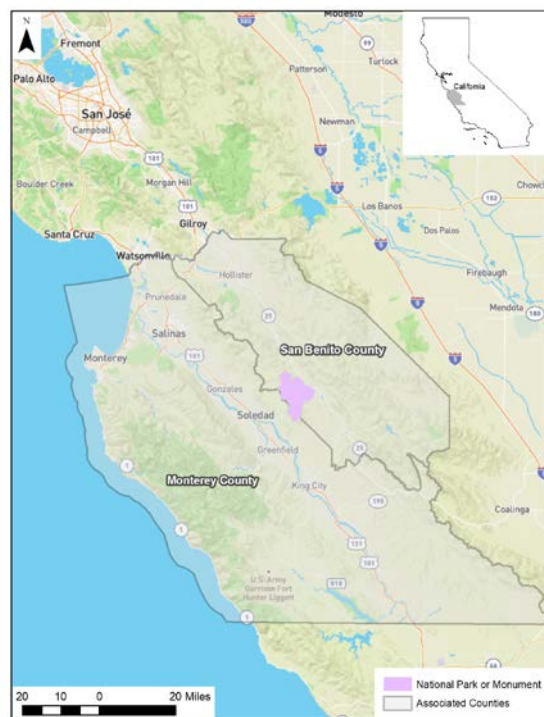
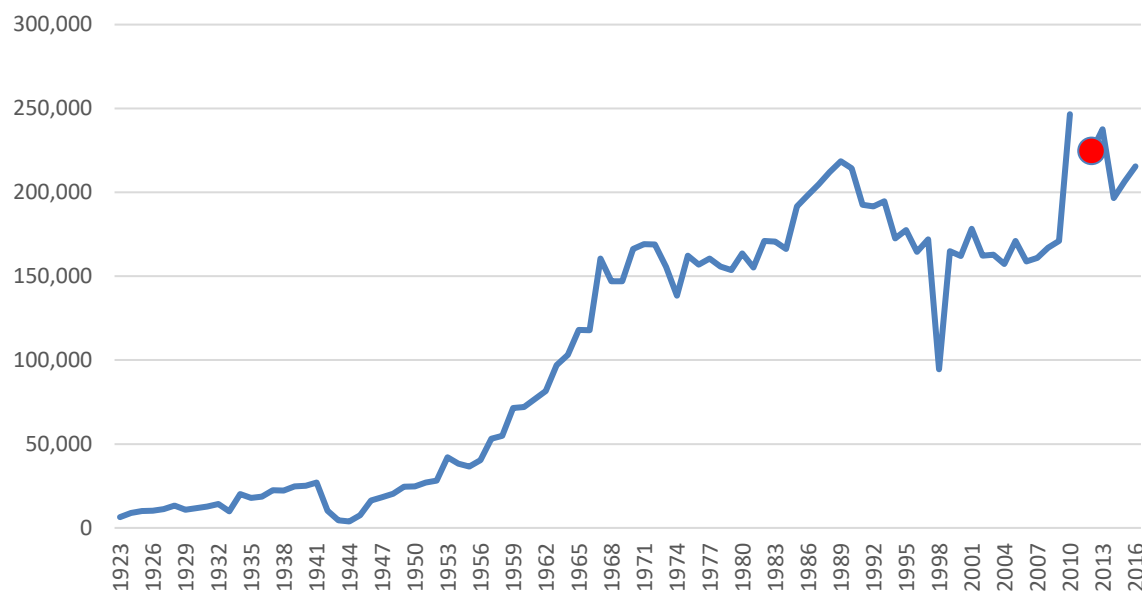


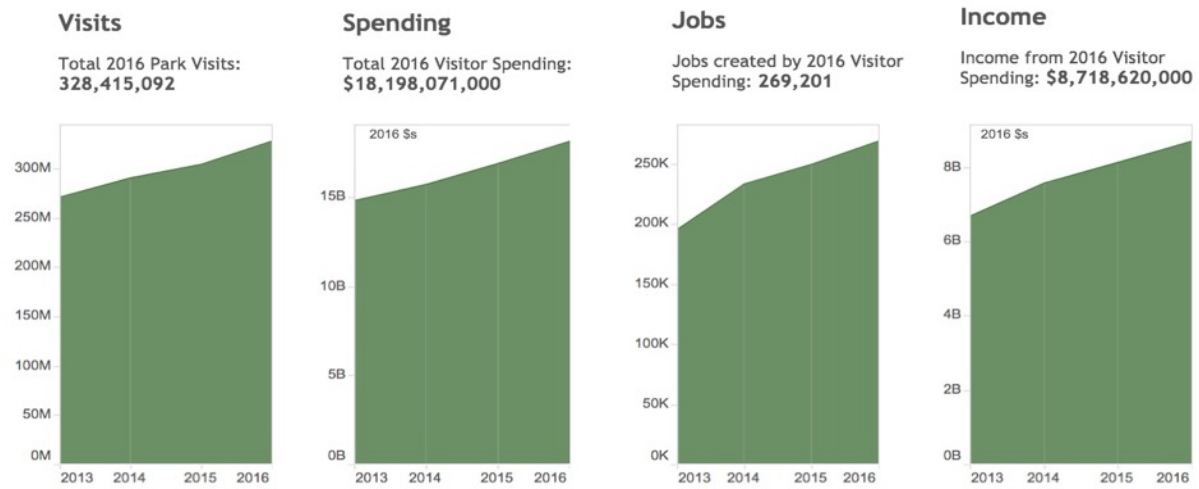
Figure 14. Recreation Visitation to Pinnacles National Park, Before and After Redesignation from National Monument. Redesignated in 2013.²



In the five years before the National Monument was redesignated as a National Park, the average annual visitation was 219,960. Visitation had begun to decline in 1986. In the three years since conversion to a National Park, the visitation decreased to an average of 206,241 visitors per year, a six percent increase.

² The 2011 visitation estimate of 393,212 was omitted from this analysis. It is more than twice the average of the previous five years and park staff believe it is inaccurate.

Figure 15. Jobs and Income Created by Visitor Spending in Pinnacles National Park.



Visitation rose rapidly from 2013 to 2016 resulting in increased visitor spending, which in turn resulted in a growth in jobs and labor income.

Saguaro National Park, Arizona⁵

Redesignated as a National Park in 1994
Annual budget (FY16): \$3,697,000

“A large wilderness park with two districts that bracket the City of Tucson and one million residents provides a unique opportunity to engage urban dwellers. Giant saguaro cacti, unique to the Sonoran Desert, cover the valley floor and rise into the neighboring mountains. Five biotic life zones are represented, from desert to ponderosa pine forest. Proclaimed a national monument March 1, 1933; transferred from U.S. Forest Service, Aug. 10, 1933; redesignated Oct. 4, 1994. Boundary changes: Nov. 15, 1961; Oct. 21, 1976; June 19, 1991; Oct. 4, 1994. Wilderness designated Oct. 20, 1976. Acreage—91,442.42 Federal: 87,526.07 Nonfederal: 3,916.35. Wilderness area: 70,905.” *From NPS’s National Parks: Index 1916-2016.*

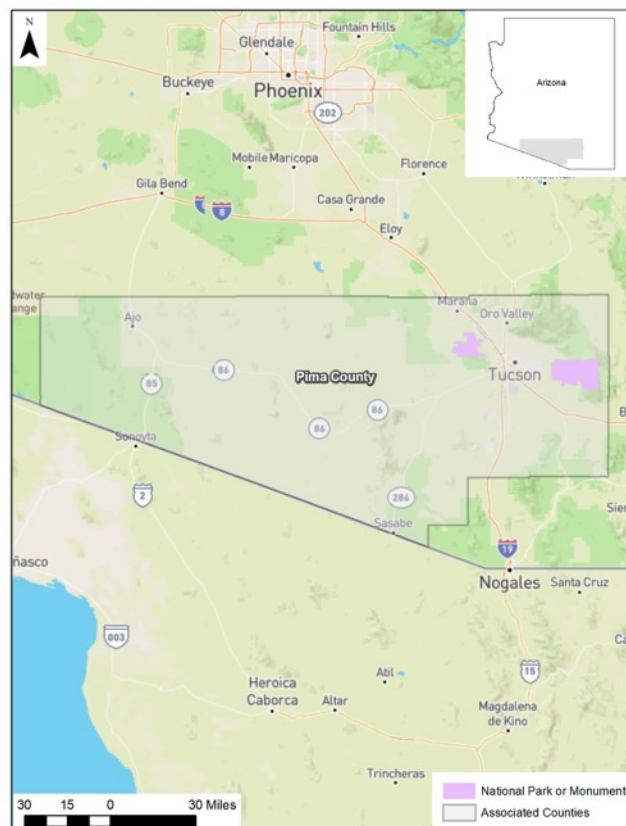
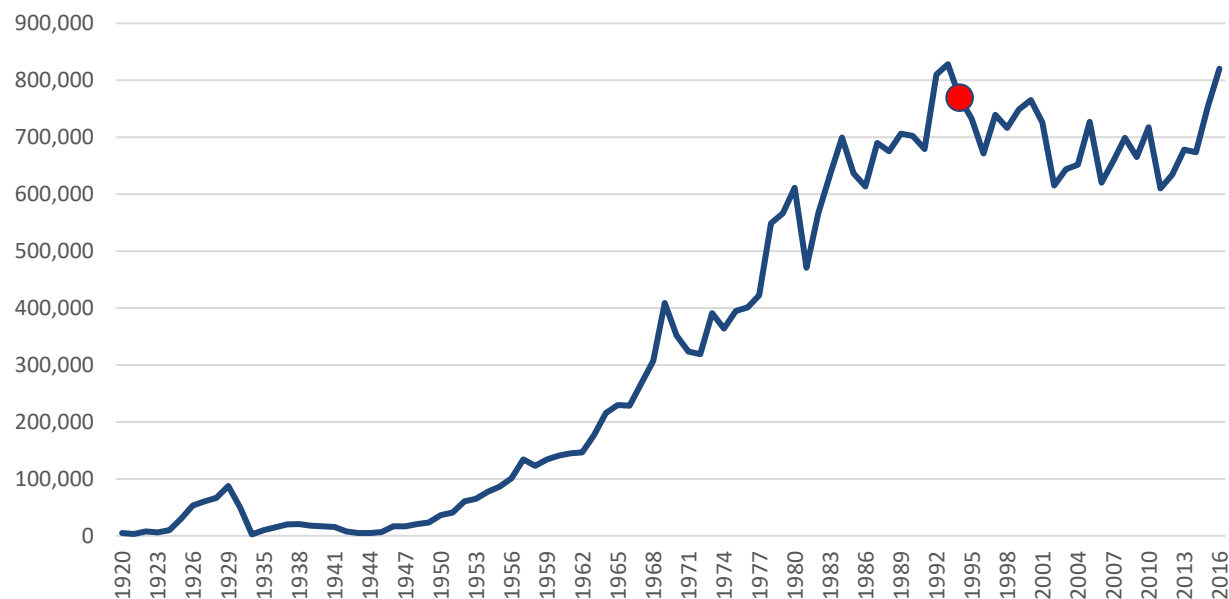


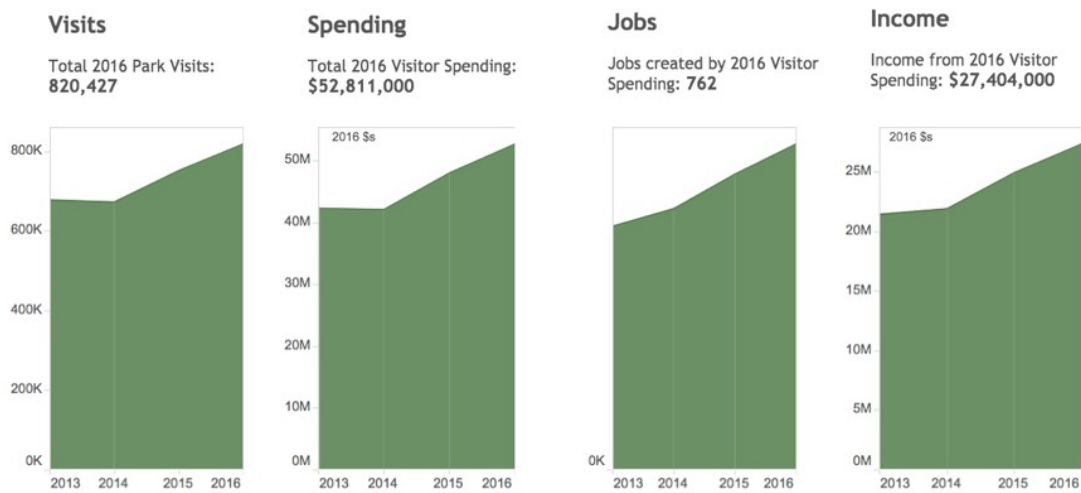
Figure 16: Recreation Visitation to Saguaro National Park, Before and After Redesignation from National Monument. Redesignated in 1994.



During the time that it was a National Monument, the unit experienced long-term continued growth in recreation visitors. In the 21 years before the National Monument was redesignated as a National Park, the average annual visitation was 591,099. In the 21 years after conversion to a National Park, the

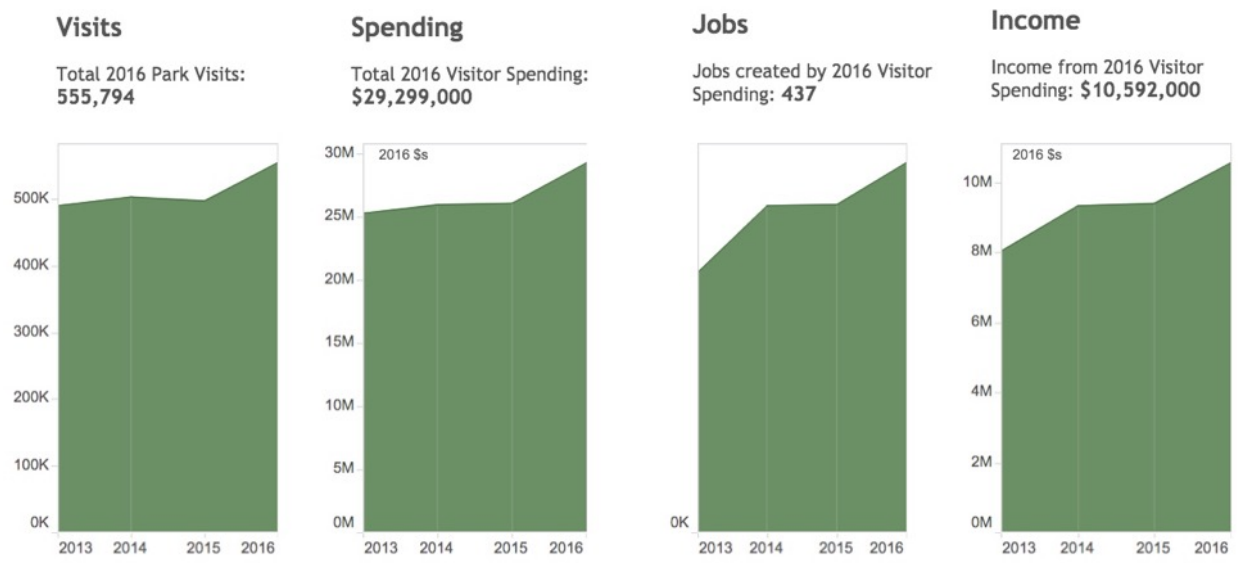
visitation increased to an average of 694,000 visitors per year, a 17 percent increase. Much of the increase in visitation occurred since 2013.

Figure 17: Jobs and Income Created by Visitor Spending in Saguaro National Park.



In 2016, 820,427 visitors to Saguaro National Park spent \$52.8 million dollars in the local economy on hotels, restaurants and bars, souvenirs, groceries, camping fees, local transportation, and gas. This in turn created 762 jobs and \$27.4 million in labor income.

Figure 19. Jobs and Income Created by Visitor Spending in White Sands National Monument.



In 2016, 555,793 visitors spent \$29.3 million, creating 437 jobs and \$10.5 million in labor income.

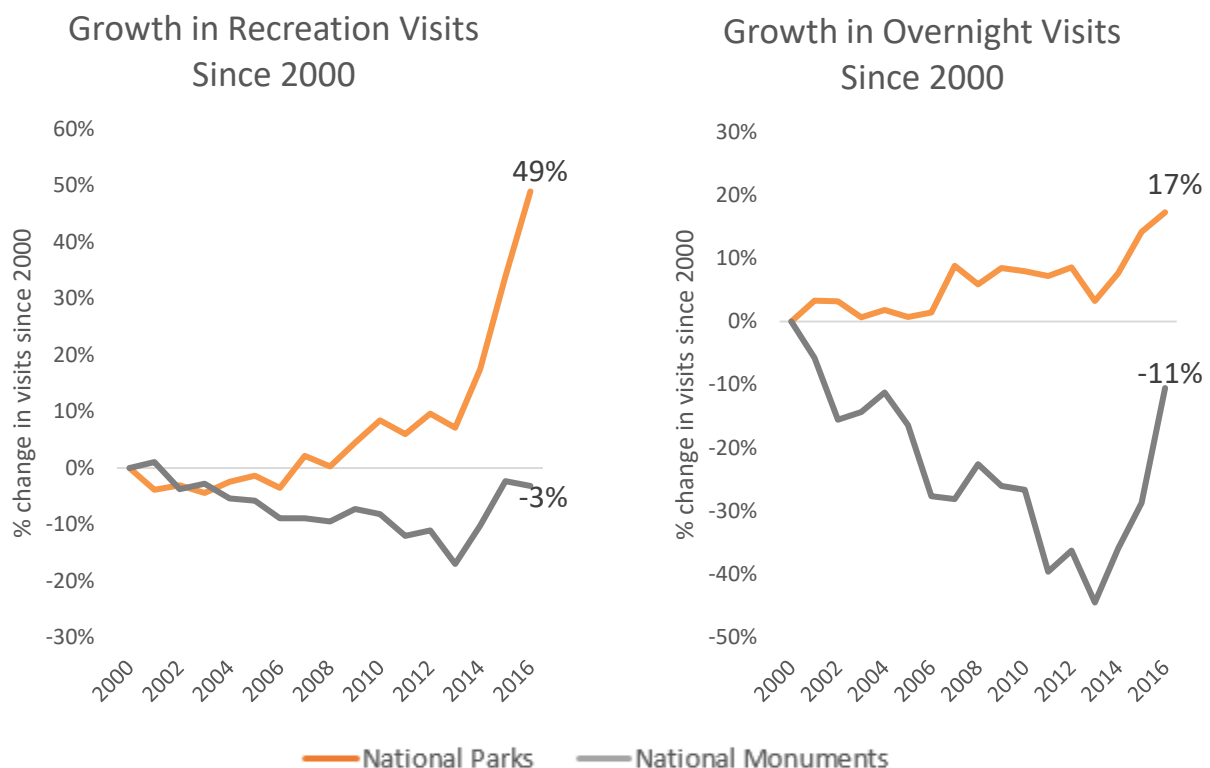
V. AGGREGATE ANALYSIS

This section compares National Park unit performance across multiple units.

Growth of Recreation and Overnight Visits Over Time

Since 2000, the number of recreation and overnight visits to all National Parks in the Intermountain West have grown much more than in National Monuments in the region (Figure 20). Total recreation visits in National Parks grew by 49 percent between 2000 and 2016 while recreation visits to National Monuments decreased by 3 percent. Over the same time period, overnight visits to National Parks grew by 17 percent while overnight visits decreased by 11 percent.⁶

Figure 20. Growth of Recreation and Overnight Visits in National Parks and National Monuments in the Intermountain West, 2000-2016.



Park and Monument Performance, 2012-2016

In Table 2, we compare the average performance of all National Monuments and all National Parks nationally, and all peer units (eight case studies of National Monuments converted to National Parks) to the performance of White Sands National Monument. The data include measures of visitation (recreation visits, overnight visits, and share of visits that are overnights) and measures of economic impacts (spending per visitor, jobs created per thousand visitors, and labor income generated per visitor) calculated as the average between 2012 and 2016, the most recent years available.

Table 2. Average Visits, Visitor Spending, and Economic Impacts by NPS Type, 2012-2016.

Annual Average	All U.S. Units		Peer Units	White Sands NM
	National Parks	National Monuments		
Recreation visits	1,205,872	286,032	711,636	498,978
Overnight visits	159,275	3,009	76,255	2,898
Share of visits that are overnights	18%	5%	12%	1%
Spending per visitor	\$209.50	\$82.30	\$66.48	\$50.81
Jobs per thousand visitors	2.90	1.05	0.93	0.71
Labor income per visitor	\$98.34	\$35.48	\$29.08	\$17.51
Total visitor spending (\$1,000s)	\$114,442	\$14,515	\$51,376	\$25,394

On average, National Parks have much greater visitation, overnight visits, spending per visitor, and economic impacts than other NPS units. Peer units are more similar to Parks than to Monuments in terms of total annual recreation visits and the share of visits that are overnight. Overnight visitors are valuable to communities near parks and monuments because overnight visitors spend more per day on lodging, food, and retail.

Peers lag behind Parks and Monuments in economic performance because average spending per visitor is much lower: \$66 per visitor compared to \$209 per visitor in Parks and \$82 in Monuments. Low visitor spending means fewer jobs are created and less job-related income is generated.

White Sands National Monument has nearly twice the average annual visits as other National Monuments: 498,978 per year compared to 286,032 on average in other National Monuments. Despite low spending per visitor (\$51 per visitor compared to \$66.48 in peer units), total annual spending is much higher than in other National Monuments.

Park visitation is strongly related to the area's geography such as the size and location of population centers, the local economy, and the availability of other attractions to bring tourists. We compare visitation and spending in White Sands National Monument to other NPS units just within New Mexico (Table 3). The units are sorted from highest to lowest spending per visitor.

Table 3. Average Annual Visitation and Visitor Spending for NPS Units in New Mexico, 2012-2016.

Park Unit	Average annual recreation visits	Average total visitor spending	Average spending per visitor
Fort Union NM	10,558	\$686,264	\$65
Carlsbad Caverns NP	415,885	\$25,779,860	\$62
El Morro NM	47,985	\$2,920,335	\$61
Bandelier NM	155,926	\$9,436,659	\$60
El Malpais NM	149,703	\$8,713,080	\$58
Pecos NHP	37,231	\$2,087,174	\$56
Gila Cliff Dwellings NM	33,127	\$1,867,918	\$56
Petroglyph NM	118,476	\$6,655,085	\$56
Salinas Pueblo Missions	29,338	\$1,649,719	\$56
Aztec Ruins NM	48,327	\$2,722,046	\$56
Chaco Culture NHP	40,069	\$2,220,817	\$55
White Sands NM	498,978	\$25,394,340	\$51
Capulin Volcano NM	52,741	\$1,528,754	\$29

White Sands visitors spend the second-lowest, at \$51 per day. However, because nearly a half million people visit White Sands annually, it has the second-highest total spending by visitors (\$25.3 million).

Peer Unit Performance Before and After Redesignation

Table 4 compares average annual visits before and after the eight peer units were redesignated as National Parks. Many units have much more data before and/or after, but we use a relatively short time frame to mitigate the effects of long-term trends of increased visitation across the National Park Service, as well as country-wide factors affecting visitation such as recessions.

Table 4. Average Annual Recreation Visits Five Years Before and After Redesignation from National Monument to National Park.

Park Unit	While designated a National Monument	After re-designation as a National Park	Difference	Percent change
Arches	145,000	239,566	94,566	65%
Black Canyon of the Gunnison	204,939	177,808	-27,131	-13%
Capitol Reef	169,620	288,513	118,893	70%
Death Valley	854,743	1,178,435	323,692	38%
Great Sand Dunes	258,333	277,446	19,112	7%
Joshua Tree	1,165,133	1,256,735	91,602	8%
Pinnacles*	219,960	206,241	-48,371	-9%
Saguaro	757,675	721,808	-35,867	-5%
Average across all 8 peers	471,925	543,319	71,394	21%
* Pinnacles data excludes 2011, which was likely inaccurate, and includes the three years of data available since redesignation.				

There is no consistent trend in changes in visitation before and after redesignation. Of the eight peer units, five had more visits after redesignation and three had fewer visits. On average, visits are 21 percent larger after redesignation, driven largely by Arches, Capitol Reef, and Death Valley.

VI. IMPLICATIONS FOR WHITE SANDS NATIONAL MONUMENT

Several units have experienced more visitation after they were redesignated as National Parks, an average of 21 percent within the first five years. We also find strong evidence that visitors to National Parks tend to spend more than visitors to National Monuments.

In Table 5 we estimate what these findings imply for White Sands National Monument. We assume visitation in both would increase by 21 percent. To estimate the range of likely impacts from redesignation, we calculate the 95 percent confidence interval for spending per visitor, jobs per visitor, and labor income using data from the peer units. This provides us with lower and upper bounds, and there is a 95 percent chance the outcome falls within this range, assuming these units follow a path similar to their peers.

Table 5. Potential Annual Change to Visitation and Visitor Spending after Redesignation as National Parks.

Measure	White Sands National Monument	
	Low estimate	High estimate
Expected total number of visitors after re-designation	601,413	601,413
Expected new visitors after re-designation	102,435	102,435
Expected new spending	\$6,163,000	\$7,458,000
Expected new jobs	84	107
Expected new labor income	\$2,686,000	\$3,272,000

White Sands already has nearly half a million visitors per year, so even small increases in the number of visitors or spending per visitor result in substantial increases in spending. We estimate approximately 102,000 additional visitors per year and \$6.1 to \$7.5 million annually in new spending. This translates into 84 to 107 new jobs and between \$2.7 million and \$3.3 million in labor income.

VII. CONCLUSION

From the case studies we conclude that there is no clear distinct designation effect such as immediately increased visits after redesignation. On average, recreation visits increased after redesignation as a National Park, but much of that growth occurred recently, from 2013 to 2016. In many of the case studies there was already long-term growth in recreation visits during the time that the unit was a National Monument. We also point out that in some instances visitation declined, corresponding with the Great Recession.

The period from 2013 to 2016 was remarkable for the National Park Service. Visitation to National Parks has accelerated rapidly since the end of the Great Recession (which lasted officially from 2007 to 2009). From 2013 to 2016, visitation to National Parks has increased nationally by 21 percent. Each of the case studies profiled showed a rapid increase in visitation from 2013 to 2016, with a corresponding rise in jobs and personal income that resulted from visitor expenditures. Even in White Sands National Monument, visitation and local economic impacts increased rapidly since 2013. Americans obviously love to visit National Park units, and we can expect the trend to continue to grow as long as the national economy grows also.

From our aggregate analysis we derived important insights. On average, National Parks have much greater visitation, overnight visits, spending per visitor, and economic impacts than National Monuments.

When we compared National Parks to National Monuments in the Intermountain West, we found that from 2000 to 2016, recreation visits to National Parks increased while visits to National Monuments decreased. Importantly, National Parks saw a much faster rise in overnight visits.

Currently, most National Monuments are not overnight destinations, substantially lessening their economic impact. Increases in visitor spending may be attained by attracting people for longer visits, more overnight visits, more guided tours, and more concession-related spending in a National Park or adjacent community. New tourist-supporting infrastructure such as lodging, restaurants, and tours could help adjacent communities better capitalize on these places as economic assets.

The National Park “Brand”

It is possible that there is something to the National Park brand and identity that National Monuments do not have, at least not to the same extent. National Parks can be a source of pride for communities, who become actively involved in promoting more visitation.

Paul Zaenger, historian and ranger of the Black Canyon of the Gunnison National Park, noted that “National Parks change the conversation. People see a National Park differently and they become more involved. Businesses and chambers of commerce like to advertise the presence of a National Park. They also capitalize on the fact that it’s something new. That’s a real selling point.”⁷

This insight is similar to that of Stephan Weiler of the Federal Reserve Bank of Kansas City, who analyzed eight National Monuments that were turned into National Parks between 1979 and 2000. He found that National Park designation leads to an increase in visitors because the National Park brand “signals” to visitors a higher level of character and quality.⁸

One reason to support the conversion of White Sands National Monument into a National Park is that visitation to National Parks has risen considerably in the last few years. There may be a number of reasons for this, including a growing economy that has risen out of the Great Recession, as well as numerous promotional efforts. For example, leading up to the National Park centennial in 2016, there was

in increase in promotion by the National Park Service, including the Find Your Park effort in cooperation with the National Park Foundation. Organizations like National Geographic Magazine and Travel America have been celebrating and promoting National Parks. And in Utah, the very rapid rise in visitation to parks is likely due in part to their Mighty Five campaign by Visit Utah. With all of these efforts, the timing may be right to create a new National Park, and to promote these for the benefit of the local economy.

VIII. ENDNOTES

¹ The differences between National Monuments and National Parks are as follows:

- The designations may be made using different legal authorities: Monuments can be created by Congress or the president under the Antiquities Act, whereas National Parks only can be created by Congress.
- Monuments can protect as few as one nationally significant resource (“objects” under the Antiquities Act), whereas National Parks protect a variety of nationally significant resources.
- Monuments can be small or large, whereas National Parks usually are large.
- With respect to management, law, regulations, rules, and guidance, they are the same for Monuments and Parks except for under the Clean Air Act. The CAA states that National Parks should be managed as Class I airsheds, whereas there are no specific requirements for Monuments. (Note: the White Sands National Park Establishment Act makes an exception and specifies that redesignation of White Sands National Monument to a National Park does not require a change in airshed classification.)

² The National Parks: Index 1916-2016. National Park Service.

<https://www.nps.gov/aboutus/upload/NPIndex2012-2016.pdf>.

³ National Park Service. 2017. Annual Visitation Report by Years.

[https://irma.nps.gov/Stats/SSRSReports/National%20Reports/Annual%20Visitation%20By%20Park%20\(1979%20-%20Last%20Calendar%20Year\)](https://irma.nps.gov/Stats/SSRSReports/National%20Reports/Annual%20Visitation%20By%20Park%20(1979%20-%20Last%20Calendar%20Year)) Accessed March 21, 2018.

⁴ National Park Service. 2016. 2016 National Park Visitor Spending Effects.

https://www.nps.gov/nature/customcf/NPS_Data_Visualization/docs/2016_VSE.pdf Accessed March 21, 2018.

⁵ The data for the eight case studies comes from several sources. The long-term trends in recreation visitation is from National Park Service Visitor Use Statistics: <https://irma.nps.gov/Stats/>. The jobs and income created by visitor spending is from <https://headwaterseconomics.org/dataviz/national-park-service-units/> using data from the National Park Service from the report “2016 National Park Visitor Spending Effects Economic Contributions to Local Communities, States, and the Nation Natural Resource Report” NPS/NRSS/EQD/NRR—2017/1421, which can be found here: https://www.nps.gov/nature/customcf/NPS_Data_Visualization/docs/2016_VSE.pdf. The long-term trends in population, employment, personal income and per capita income are from the U.S. Department of Commerce. 2017. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C., reported by Headwaters Economics’ Economic Profile System, <http://headwaterseconomics.org/eps>. National Park budgets (FY16 final) from National Park Service “Green Book” Budget Justification and Performance Information, Fiscal Year 2018. <https://www.nps.gov/aboutus/upload/fy-2018-nps-greenbook.pdf>.

⁶ The pattern is similar for all units in the U.S.: recreation visits increased by 24 percent in National Parks and 4 percent in National Monuments. Overnight visits increased by 14 percent in National Parks and decreased by 7 percent in National Monuments.

⁷ Personal communication, 3/21/18, with Paul Zaenger, park historian and ranger.

⁸ Weiler, S. 2005. “A Park by Any Other Name: National Park Designation as a Natural Experiment in Signaling.” Federal Reserve Bank of Kansas City. Research Working Paper 05-09. The NP units examined were: Biscayne FL, Channel Islands CA, Great Basin NV, Joshua Tree CA, Saguaro AZ, Death Valley CA, Blank Canyon CO, and Great Sand Dunes CO.