

A Decade of Opportunity

How the Designation of Organ Mountains-Desert Peaks National Monument is Boosting Southern New Mexico's Economy



Final Report

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A Decade of Opportunity — How the Designation of Organ Mountains-Desert Peaks National Monument is Boosting Southern New Mexico's Economy

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Executive Summary

The Organ Mountains–Desert Peaks National Monument (OMDPNM/the Monument) was established by presidential proclamation in May 2014 to protect 496,330 acres containing significant prehistoric, historic, geologic, and biologic resources for current and future generations. In addition, the Monument offers abundant opportunities to participate in a variety of recreation activities, including hiking, mountain biking, rock climbing, hunting, OHV use on designated routes, and camping.

This report documents the positive economic impacts that OMDPNM has had on the economies of Doña Ana and Luna Counties in New Mexico since its designation in 2014 and in 2022. The report also looks back at economic projections made prior to the site being designated as a National Monument.

The study uses visitation data from 2012 through 2022 to identify the number of non-local visitors who visited the Monument and combines this information with visitor spending profiles and economic multipliers to estimate the number of jobs, and the amount of labor income, economic output, and tax revenue created by visitor spending during the nine years since OMDPNM was created. BBC also accounted for the economic impacts of livestock grazing on the Monument as well as spending by the Bureau of Land Management (BLM) to operate the Monument. Because the BLM only measures visitor data in certain places in the Monument, it is likely that total visitation and economic impact is greater than quantified in this report.

The site's change in designation to a National Monument in 2014 raised the profile of OMDPNM, leading to an increase in visitation and visitor spending in Doña Ana and Luna Counties that has created significant economic impacts in the region, but with most impacts occurring in Doña Ana County due to visitor use patterns. Most non-local visitors stay in the area overnight, which increases their spending and generates larger economic impacts compared to day visitors. In particular, this report found that:

- Total cumulative economic impacts since monument designation are more than \$234 million, including \$35 million of positive economic impacts in 2022.
- Visitation to the Monument supported 305 jobs in 2022.
- Since the Monument's designation in 2014, visitation has generated \$12.9 million in increased tax revenue for state, county, and local governments. In 2022, visitation to the Monument generated \$1.9 million in tax revenues, compared to \$0.8 million in 2012, before the Monument's designation.
- Visitation has more than tripled from 183,900 in 2012, prior to the site's monument designation, to 612,781 in 2022. This exceeds initial predictions that establishing the monument would double visitation.
- Economic impacts from visitation to the Monument in 2022 exceeded initial predictions made prior to protection by 51 percent.

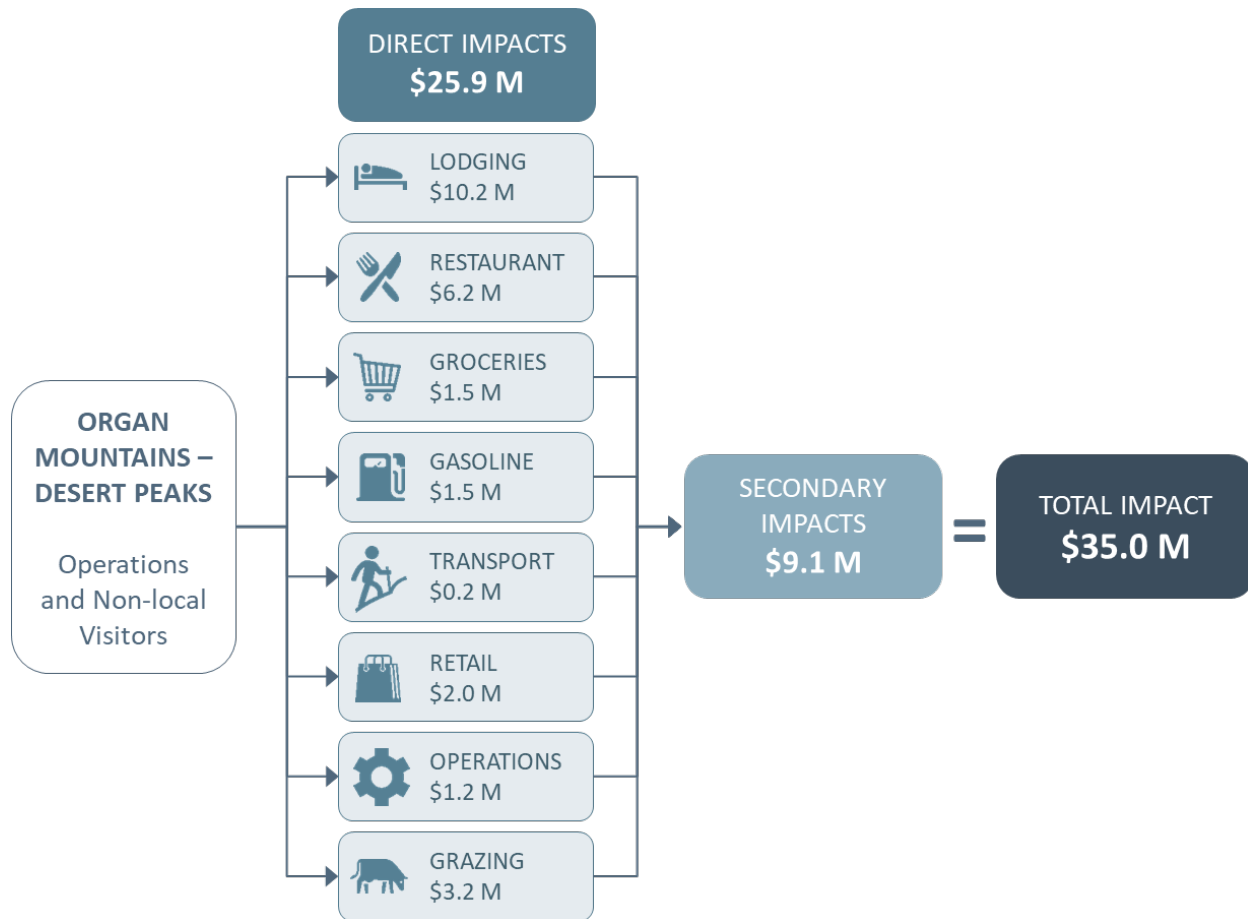
- Designation of the Monument has encouraged more local residents to visit, improving quality of life and public health (locals comprise 61 percent of total visitors).
- Of non-local visitors, 73 percent said the Monument was the reason for their visit to the area.
- BLM's budget for Monument operations and staffing has increased by a factor of six since designation, increasing protection, research, and recreation activities, and bringing additional dollars into the local economy.

There are several important factors that help explain why the OMDPNM has been so successful at generating economic and fiscal impacts in the surrounding region:

- The OMDPNM has been successful at attracting visitors due to the value of the national monument brand, which distinguishes the site's value compared to other public lands. Peer-reviewed studies have found that, after National Parks, National Monuments have the highest perceived value of public land designations.
- Visit Las Cruces, a tourism ambassador program run by the City of Las Cruces, capitalized on the National Monument value with a series of events, including the Monuments to Main Street (M2M) month, started in 2017, to celebrate OMDP becoming a National Monument. The event—which includes Yoga on the Monument, hiking trips, stagecoach rides, flyovers of historic sites, music, and other events—attracts visitors from across the country.
- The monument designation also raised the profile of south-central New Mexico by adding to the existing wealth of attractions in the region. Along with White Sands and Prehistoric Trackways National Monuments, which draw visitation and economic activity to the region, the addition of OMDPNM provides visitors with an opportunity to visit multiple monuments in one visit.
- OMDPNM's proximity to local communities, including Las Cruces, Deming, and Hatch, allows the region to capture the benefit of Monument visitation by offering visitors opportunities to patronize local businesses for supplies, services, lodging, and entertainment.

As shown in Figure 1, OMDPNM had a total annual economic impact of about \$35.0 million in 2022, including direct and secondary impacts. Spending generated by OMDPNM operations and non-local visitor expenditures circulates in the local economy, as businesses where visitors spend their money purchase goods and services from other businesses and as workers spend a portion of their earnings on local goods and services. This recirculation of money in the economy is termed a “secondary impact.”

Figure 1.
Organ Mountains–Desert Peaks National Monument, Total Annual Economic Impact in 2022, Doña Ana and Luna Counties, New Mexico

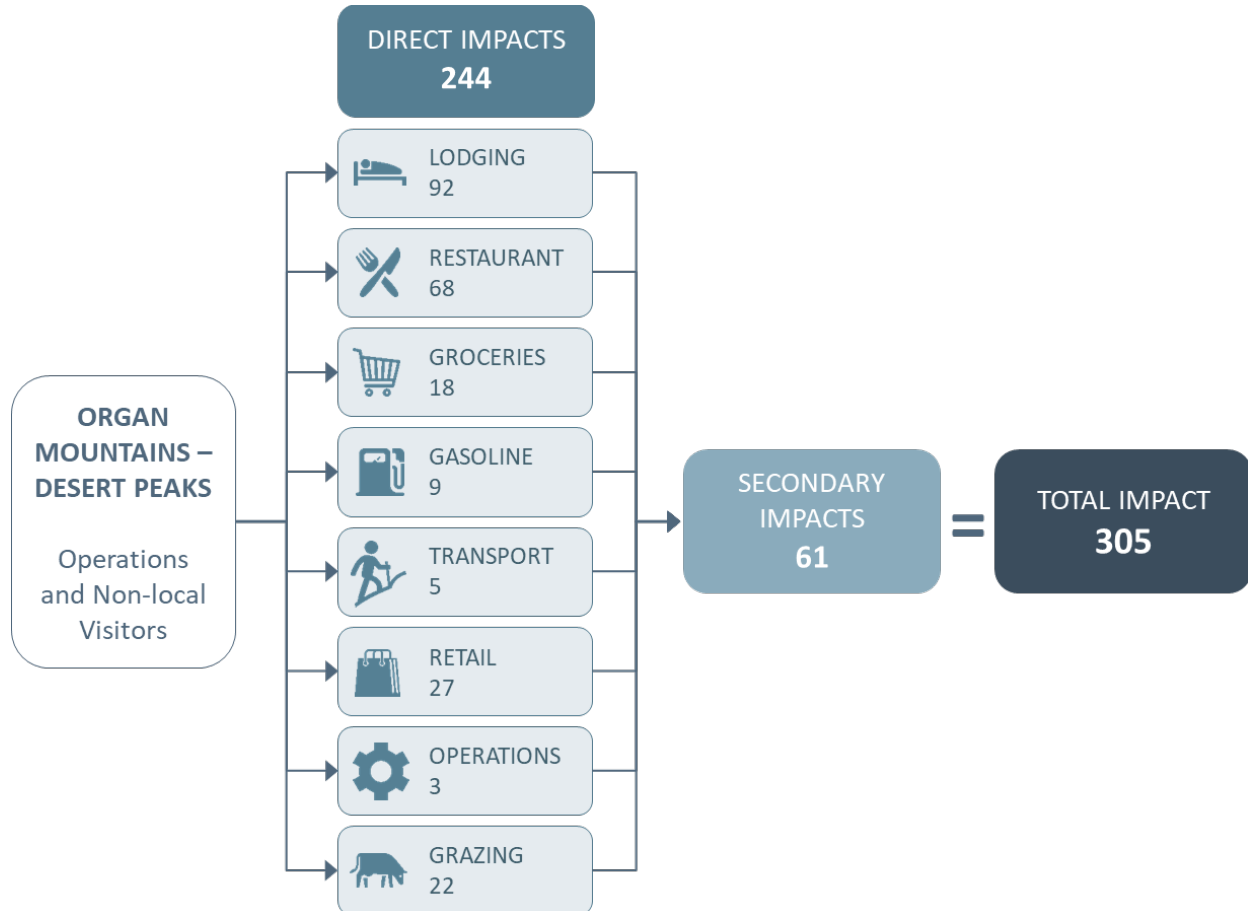


Note: Direct Expenditures reported net of taxes (sales, lodging and excise).

Source: BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.

Figure 2 shows the employment impacts associated with operations and visitor spending at OMDPNM in 2022. Economic activity generated by OMDPNM operations and visitation supported an estimated 305 jobs per year in Doña Ana and Luna Counties, New Mexico during the most recent year.

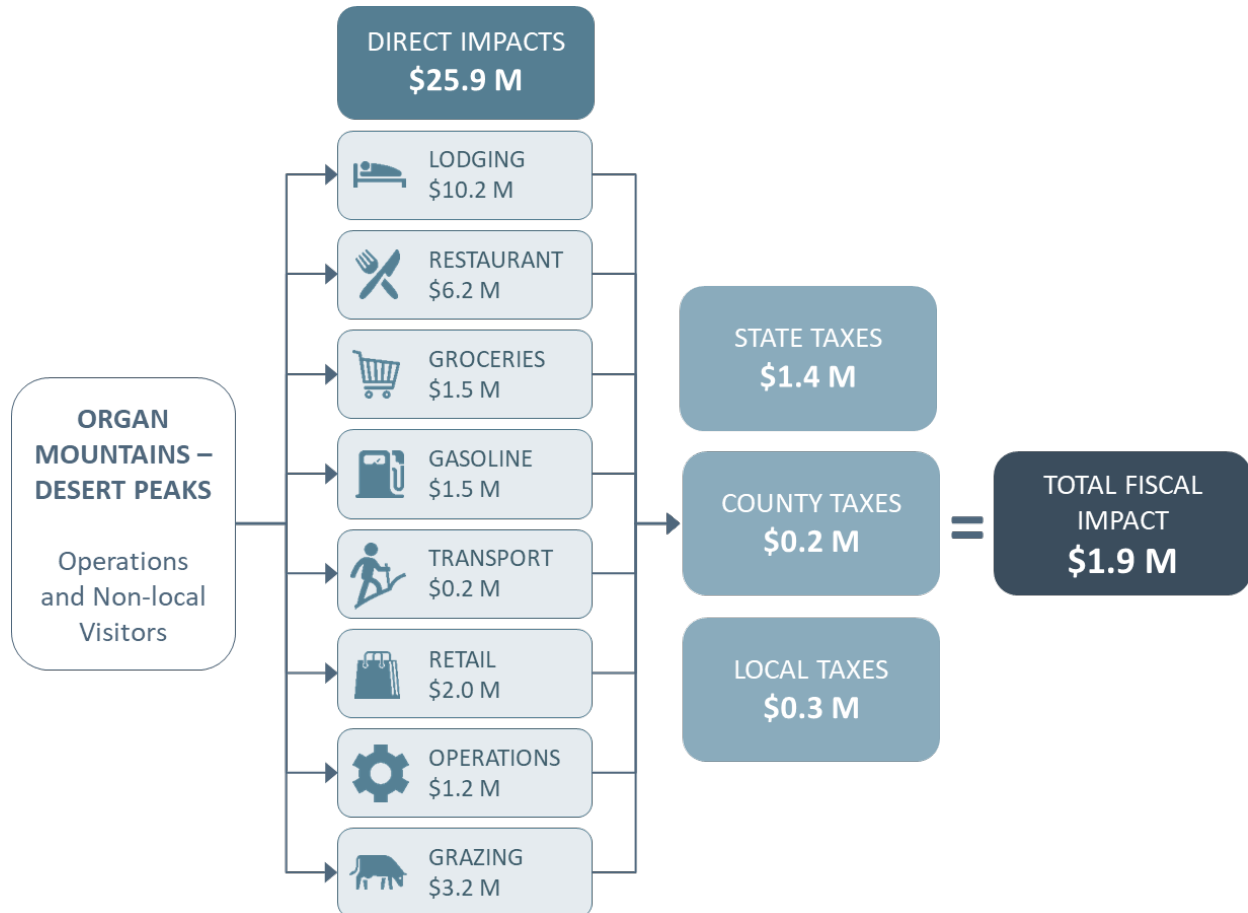
Figure 2.
Organ Mountains–Desert Peaks National Monument, Total Employment Impact in 2022, Doña Ana and Luna Counties, New Mexico



Source: BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.

Figure 3 shows the fiscal impacts associated with operations and visitor spending at OMDPNM in 2022. Economic activity generated by OMDPNM operations and visitation generated an estimated \$1.9 million of tax revenues for local, county, and state governments in 2022.

Figure 3.
Organ Mountains–Desert Peaks National Monument, Local, State, and County Fiscal Impacts, 2022



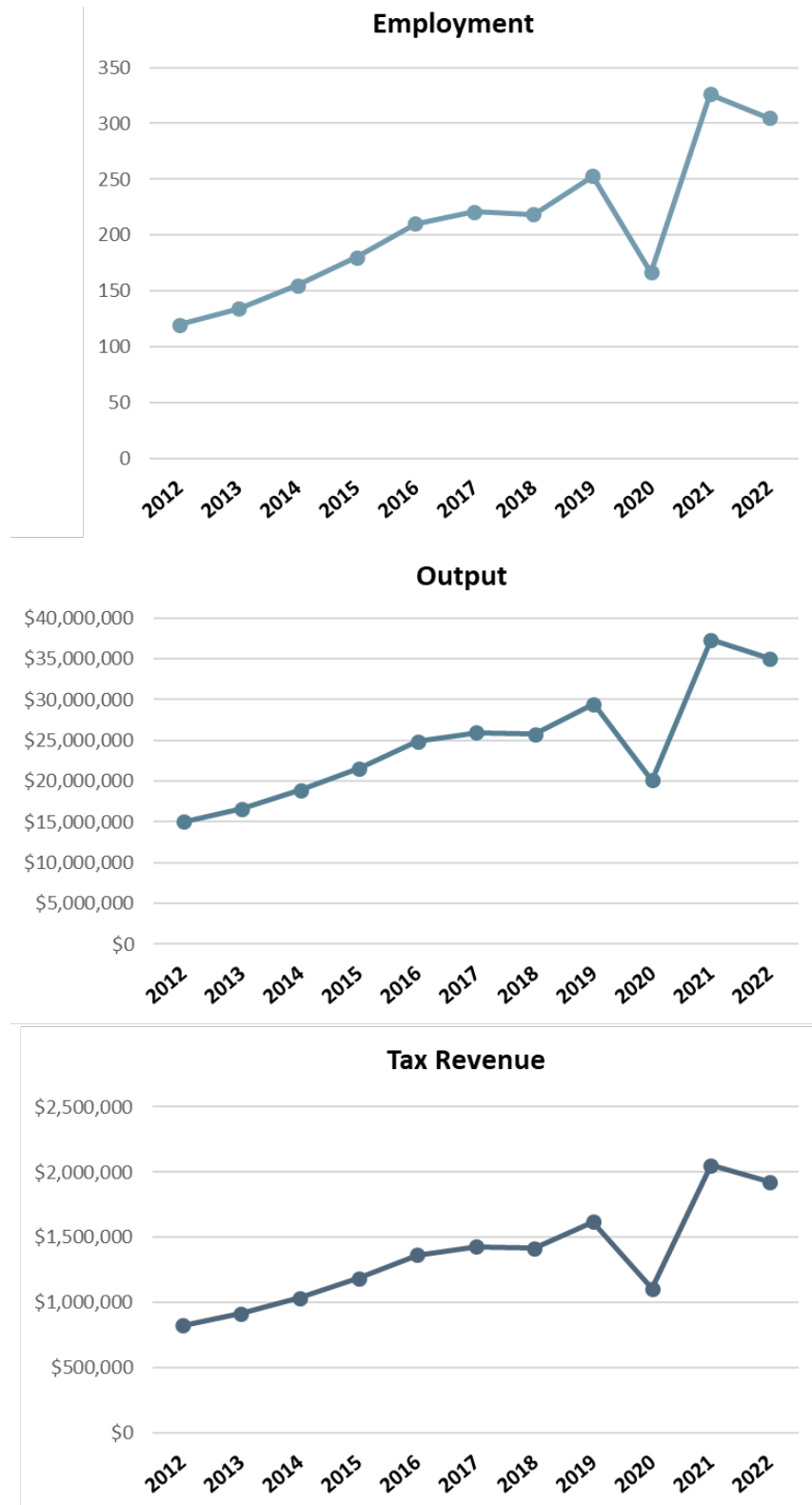
Note: Direct Expenditures reported net of taxes (sales, lodging and excise).
 Source: BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.

Figure 4 presents historical trends in employment, economic output, and tax revenue generation of OMDPNM in Doña Ana and Luna Counties since 2012. As the figure shows, all three metrics have grown substantially since the Monument was designated in 2014. Employment, output, and tax revenue generated by the Monument recovered sharply following the relaxation of stay-at-home precautions enacted at the start of the COVID-19 pandemic in 2020.

Figure 4.
Organ Mountains–Desert Peaks National Monument, Employment, Output, and Tax Revenue Trends (2012 – 2022), Doña Ana and Luna Counties, New Mexico

Note: Monument designation was granted in May of 2014. Tax revenues include state, county, and municipal tax receipts.

Source:
 BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.



Background and Methodology

Background

The OMDPNM covers more than 496,000 acres of land in south-central New Mexico near the City of Las Cruces and within Doña Ana and Luna Counties. The Monument is administered by the Bureau of Land Management (BLM) and comprises five distinct mountain ranges: the Organ, Doña Ana, Sierra de las Uvas, Robledo, and Potrillo Mountains, as well as the Potrillo Volcanic Field. These ranges collectively form four management units within the OMDPNM. This vast and diverse landscape is characterized by a patchwork of Chihuahuan desert expanses intersected by areas of riparian forest. It also includes deep canyons, volcanic craters and fumaroles, and towering sky island mountain peaks. Within this expanse lies one of the most significant collections of prehistoric sites in the American Southwest.

The abundance of natural beauty, rich cultural and ecological resources, and myriad recreation opportunities draw all manner of visitors to the Monument. One of the defining features of OMDPNM is its significant collection of historical and cultural attractions, notably featuring petroglyphs, ruins, and cave dwellings, which can be traced back thousands of years to the earliest inhabitants of the region. Archaeological evidence supports a human presence spanning over 8,000 years, encompassing groups such as the Mimbres and Jornada peoples, as well as Colonial Spanish, Mexican, and other Native American societies.

OMDPNM also contains an array of captivating historical sites. Renowned figures from North American history, such as Geronimo and Billy the Kid, have left their legacies on these lands at Geronimo Cave and Outlaw Rock, respectively. The Camino Real de Tierra Adentro and Butterfield (Stagecoach) Overland National Historic Trails (NHT) also travel through the Monument, treating visitors to stunning vistas and unique desert ecology.

The area's relative seclusion benefits its wildlife, functioning as a vital passage for animal movement between neighboring mountain ranges and designated Wilderness Areas. Indigenous species—including mule deer, pronghorn, jackrabbits, quail, and various raptors like golden eagles and great-horned owls—thrive within this region.

In addition, recreationists enjoy the Monument's many opportunities to engage in different activities. A survey of Monument visitors found that hiking and camping are the most popular activities, followed by backpacking, mountain biking, and trail running.¹ Other popular recreation activities include hunting, horseback riding, picnicking, wildlife viewing and bird watching, rock climbing, and bikepacking.

Monument Designation and Preservation Efforts

National Monuments can either be designated by Congressional legislation or by the President of the United States through the Antiquities Act of 1906. This Act grants the President the authority to

¹ Fix, P., Brown, C., Virden, R., Casey, T. 2018. Organ Mountain Desert Peaks National Monument Outcomes Focused Management Study, Spring 2017.

proclaim, by executive order, “historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest” as national monuments, ensuring their protection.

Following an extensive advocacy effort, The Organ Mountains–Desert Peaks National Monument was established by presidential proclamation on May 21, 2014, by President Barack Obama. The proclamation cited the Monument’s significant cultural, geologic, and ecological resources as the reason for the site’s designation as it would help preserve the cultural, prehistoric, and historic values of the site for the benefit of all Americans.

Methodology

There is a rich academic literature studying the benefits that public land designations create for visitors and gateway communities. The earliest studies on the subject emerged in the early 1990’s, with studies documenting the impacts of monument designation first appearing in 1996.² As additional studies were published, the link between monument designation and economic impact was described as a two-part process that worked by conveying information about a site’s quality, leading to increased perceptions of value that benefited existing visitors and generating additional demand to visit the site from new visitors.³

This study builds on the methods developed by previous work to estimate the economic impacts of visitation to OMDPNM by focusing on the spending of non-local visitors whose primary trip purpose is to visit OMDPNM. Non-primary visitors (those non-local visitors who visit the Monument as the secondary reason for being in the area) are also included with non-local visitors to examine economic impact. Additionally, the impacts created by monument operations and grazing are also included.

Like previous studies, this report starts its analysis with visitor data from OMDPNM provided by the BLM. The visitation data are combined with the results of a survey of OMDPNM visitors to estimate the share of primary and non-primary local and non-local monument visitors. Information from a U.S. Forest Service study of visitor spending is combined with the OMDPNM visitation data and visitor survey data to estimate the amount of spending by non-local OMDPNP visitors within 50-miles of the Monument to estimate the amount of new money introduced to the study-area economy.

Critical factors in the analysis include the number of visitors, their origin (i.e., local and non-local) and details about their visit, including whether or not they stayed overnight and in what type of accommodation. This information is then used to estimate the pattern of their expenditure. Local visitation, while important for the quality of life of residents, is not included in the analysis because the money locals spend visiting the Monument would have been spent in other parts of the economy if it were not spent during the visit. As a result, local spending does not constitute an economic impact.

The study also considers the economic impact of BLM spending to operate and administrate the Monument. The spending associated with BLM activities is taken from Annual Manager Reports published by the BLM at the end of each fiscal year. The reports document the amount of spending

² Rasker, R. & Hackman, A. (1996). Economic development and the conservation of large carnivores. *Conservation Biology*, 10(4), 991–1002.

³ Cline, S., Weiler, S., Aydin, A. 2011. The Value of a Name: Estimating the Economic Impact of Public Land Designations. *The Social Science Journal*, 48, 681-692.

associated with staffing, operations, and maintenance. Grazing impacts were also included in the study based on information contained in the Annual Manager Reports.

To calculate current and cumulative economic impacts, BBC utilized the IMPLAN Regional Input-Output Modeling System software multipliers to calculate secondary (induced and indirect) economic impacts. Economic impacts are expressed in the employment and economic output supported by OMDPNM non-local visitation and non-local visitor spending. The IMPLAN model also calculated current fiscal benefits—state, county, and local tax revenues—based on visitor-related local spending. BBC estimated impacts based on spending for 2022 as well as cumulative spending from 2012 (prior to when the monument was first designated) through 2022.

Report Organization

This report is organized into seven sections:

- **Study Area** provides a general description of the study area’s location, population, demography, and economic characteristics;
- **Visitation and Spending** provides a description of OMDPNM visitation and visitor spending;
- **Spending Flow Model** provides a description of the spending flow model used to calculate economic impacts;
- **Total Economic Impact (2022)** documents economic impacts in the most recent year;
- **Cumulative Economic Impact (2014-2022)** documents cumulative economic impacts occurring since the Monument’s designation;
- **Fiscal Impacts** reports state, county, and local fiscal impacts; and
- **Comparisons with Previous Projections** contrasts the most recent results with projections made in 2013 and discusses reasons the OMDPNM has been so successful at generating economic impacts in the region surrounding the Monument.

Study Area

The OMDPNM contains four sub-areas in south central New Mexico: the Organ Mountains, the Desert Peaks (including the Robledo Mountains and Sierra de las Uvas), the Potrillo Mountains and Potrillo Volcanic Field, and the Doña Ana Mountains. The study area for this report on the economic impacts of the Monument includes Doña Ana and Luna Counties.

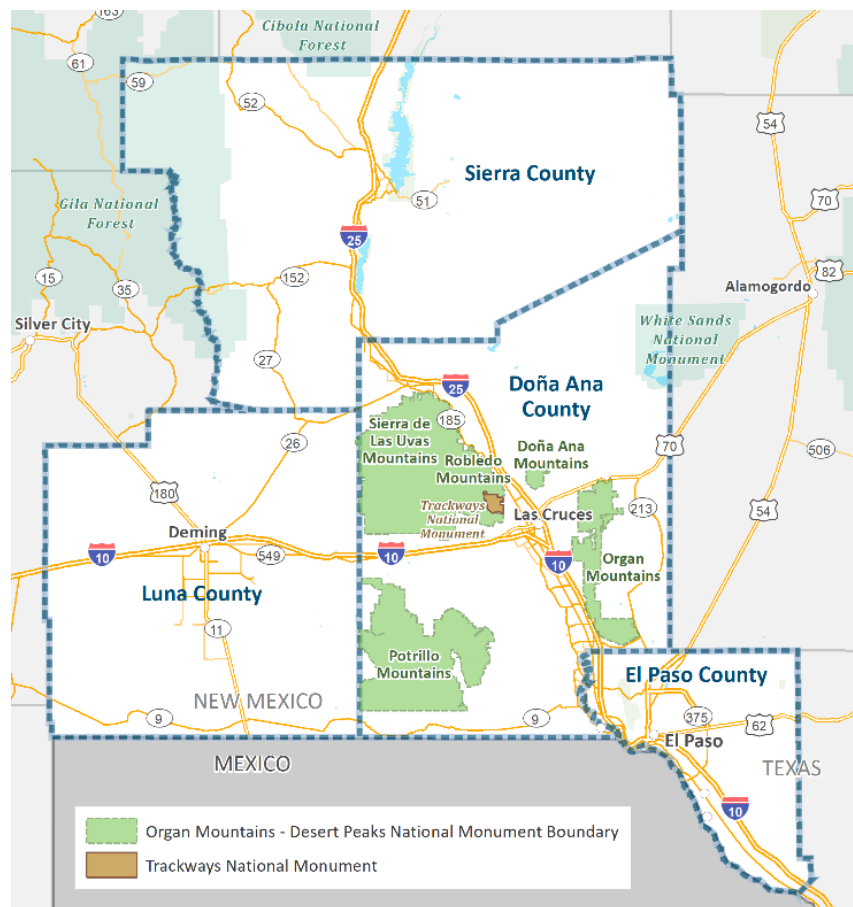
When analyzing economic activity within a certain area, it is essential to define a suitable geographic scope. A local economy is defined by factors like proximity, transportation, and the locations of goods and services. Precisely delineating the relevant geographic area can allow for accurate assessment of direct and indirect economic impacts.

Location within New Mexico and the Southwestern United States

As shown in Figure 5, a small portion of the Potrillo Mountains area of the OMDPNM extends into Luna County, west of Doña Ana County. The study area of Doña Ana and Luna Counties sits on the southern boundary of the state of New Mexico along its border with the country of Mexico. Doña Ana County also shares a border with the state of Texas to the southeast. Las Cruces, the Doña Ana County Seat, is a one-hour drive to the El Paso International Airport, which handled 3.7 million passengers in 2022.

Figure 5.
Location of Organ Mountains–Desert Peaks National Monument in New Mexico

Source:
BBC Research & Consulting, 2023.



Doña Ana County connects to Albuquerque to the north via Interstate 25. Travel between Doña Ana and Luna Counties primarily occurs along Interstate 10, which runs west from Las Cruces toward Tucson, AZ and southeast to El Paso, TX. Sub-areas within the OMDPNM are separated by the I-10 and I-25 corridors.

Population and Demographics

In 2020, the population of Doña Ana County was 219,561 and the population of Luna County was 25,427; combined, the Counties comprise approximately 12 percent of the state's total population. Median age in Luna County is similar to the median age of all New Mexico residents (39.8 years compared to 39.2 years throughout the state), but Doña Ana County skews slightly younger with a median age of 36.0 years.⁴

Sixty-seven percent of Doña Ana County residents and 66 percent of Luna County residents identified as Hispanic or Latino in 2020, compared with 48 percent of all New Mexico residents. Throughout the state, 12 percent of residents identified as American Indian, while 3.8 and 3.2 percent of residents identified as American Indian in Doña Ana and Luna Counties, respectively.

Economy and Industry

The economies of both counties are characterized by substantial employment in state and local government as well as a focus on health care provision and retail & service industries. Additionally, Las Cruces is home to the flagship New Mexico State University (NMSU), which has a student body of more than 20,000.

The most recent data from the U.S. Census Bureau American Community Survey (ACS) indicate that the median household income in Doña Ana County (\$47,151) and in Luna County (\$33,914) lags behind the state's median household income (\$54,020) and the unemployment rate is slightly higher (7.4% and 7.5%, respectively, compared to 6.6% statewide).⁵

Doña Ana County had a total of 102,222 jobs in 2021. The largest industries in the county, by employment, were government (20%), health care and social assistance (17%), retail trade (9%), and accommodation and food services (8%).⁶ Luna County had a total of 9,186 jobs in 2021, and the largest sectors with disclosed employment figures were government (21%), retail trade (12%), manufacturing (9%), and accommodation and food services (8%). Retail trade and accommodation and food services are important beneficiaries of non-local visitation.

The largest sectors by percentage of total disclosed work earnings in Doña Ana County in 2021 were government (29%), health care and social assistance (16%), construction (7%), and professional, scientific, and technical services (6%). In Luna County, the largest sectors by earnings were government (35%), manufacturing (9%), retail trade (8%), and construction (7%).

⁴ U.S. Census Bureau 2020 Decennial Census, Table DP1.

⁵ U.S. Census Bureau ACS 5-Year Estimates, 2021, Table DP03.

⁶ Bureau of Economic Analysis, 2021, Table CAEMP25N.

Visitation and Spending

Organ Mountain–Desert Peaks National Monument Annual Visitation and Spending

Annual visitation to OMDPNM is collected and reported by the BLM for 2012 and the period from 2017 through 2022, as shown in Figure 6 below. BBC estimated visitation between 2013 and 2016 by calculating the average annual growth rate of visits between 2012 and 2022 and then using that growth rate to back-cast visits for the years with missing data (i.e., 2013 through 2016).

As Figure 6 shows, annual visitation has increased from 183,900 visits in 2012 to 612,781 visits in 2022, which is down from 662,445 visits in 2021. The drop in visitation between 2021 and 2022 was largely a result of the end of pandemic-era restrictions that led to a nation-wide trend in which record numbers of visitors recreated outdoors in 2021.⁷

BBC combined the annual visitation data from BLM with results from the OMDPNM Outcomes Focused Management Study that described characteristics about annual visitation, including visitor origins, length of stay, and accommodations.⁸ This study found that approximately 61 percent of visitors are locals while 39 percent of visitors are non-locals from outside the two-county study area used in this report. Of the 39 percent of non-local visitors, about 73 percent stated that visiting the Monument was the primary purpose of their trip, compared to 27 percent who said it was not. Of the primary purpose visitors, about 28 percent visited the Monument as a day trip, compared to 27 percent who camped overnight on BLM land and 45 percent who stayed overnight in other accommodations.

⁷ See <https://outdoorindustry.org/resource/2023-outdoor-participation-trends-report/#:~:text=Although%202022%20outdoor%20recreation%20included.the%20pandemic%20began%20in%202020>.

⁸ Fix, P., Brown, C., Virden, R., Casey, T. 2018. Organ Mountain Desert Peaks National Monument Outcomes Focused Management Study, Spring 2017. Project report for the BLM Las Cruces District Office. BLM PLRRP Report #3. Fairbanks, AK: University of Alaska Fairbanks, School of Natural Resources and Extension, Department of Natural Resources Management.

Figure 6.
Organ Mountains–Desert Peaks National Monument Annual Visitation (2012 through 2022)

| Visitor Type | 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
|--------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Total Visits to OMDPNM | 612,781 | 662,445 | 296,603 | 493,967 | 415,690 | 420,714 | 396,836 | 327,419 | 270,145 | 222,889 | 183,900 |
| Non-Local Visits | 238,985 | 258,354 | 115,675 | 192,647 | 162,119 | 164,078 | 154,766 | 127,693 | 105,356 | 86,927 | 71,721 |
| Non-Local Primary | 175,176 | 189,373 | 84,790 | 141,210 | 118,833 | 120,270 | 113,443 | 93,599 | 77,226 | 63,717 | 52,571 |
| Day | 49,409 | 53,413 | 23,915 | 39,829 | 33,517 | 33,922 | 31,997 | 26,400 | 21,782 | 17,972 | 14,828 |
| BLM Overnight | 46,534 | 50,305 | 22,524 | 37,511 | 31,567 | 31,949 | 30,135 | 24,864 | 20,514 | 16,926 | 13,965 |
| Other Overnight | 79,233 | 85,655 | 38,351 | 63,871 | 53,749 | 54,399 | 51,311 | 42,336 | 34,930 | 28,820 | 23,778 |
| Non-Local Non-primary | 63,809 | 68,980 | 30,885 | 51,437 | 43,286 | 43,809 | 41,323 | 34,094 | 28,130 | 23,209 | 19,150 |
| Local Visits | 373,796 | 404,091 | 180,928 | 301,320 | 253,571 | 256,636 | 242,070 | 199,725 | 164,788 | 135,962 | 112,179 |
| Day | 343,657 | 371,510 | 166,340 | 277,024 | 233,125 | 235,943 | 222,552 | 183,622 | 151,501 | 125,000 | 103,134 |
| BLM Overnight | 11,152 | 12,056 | 5,398 | 8,990 | 7,565 | 7,656 | 7,222 | 5,959 | 4,916 | 4,056 | 3,347 |
| Other Overnight | 18,988 | 20,527 | 9,191 | 15,307 | 12,881 | 13,037 | 12,297 | 10,146 | 8,371 | 6,907 | 5,699 |
| Total Primary Overnight Trips | 157,209 | 169,950 | 76,093 | 126,727 | 106,645 | 107,934 | 101,808 | 83,999 | 69,306 | 57,182 | 47,180 |
| Non-local | 125,767 | 135,960 | 60,875 | 101,382 | 85,316 | 86,347 | 81,447 | 67,199 | 55,444 | 45,746 | 37,744 |
| Local | 30,140 | 32,583 | 14,589 | 24,296 | 20,446 | 20,693 | 19,519 | 16,104 | 13,287 | 10,963 | 9,045 |

Note: Visitation for 2013 through 2016 was estimated using the average annual visitation growth rate between 2012 and 2022 to back-cast visitation between 2013 and 2016.

Source: BBC Research & Consulting, 2023; BLM Las Cruces District Office; Fix, P., Brown, C., Virden, R., Casey, T. 2018. Organ Mountain Desert Peaks National Monument Outcomes Focused Management Study, Spring 2017.

Based on the survey responses, BBC estimated that in 2022 approximately 239,000 non-local visitors visited the monument. Of this total, the Monument was the primary destination for about 175,176 non-local visitors, while 63,809 non-local visitors visited the monument as part of a trip with another primary destination. Of non-local primary visitors, approximately 49,409 were day users, while 46,534 camped on BLM land, and 79,233 stayed overnight in other accommodations, including hotels, motels, and commercial campgrounds.

Average daily non-local visitor expenditures were estimated in a 2017 U.S. Forest Service (USFS) study of National Visitor Use Monitoring (NVUM) data. The total spending was originally reported by party within 50-miles of the party’s destination.⁹ BBC converted the per-party spending estimates to per-visit estimates by dividing the per-party spending estimates by the average party size to the Lincoln National Forest—located approximately 50 miles northeast of Las Cruces—following guidance on the conversion provided in the 2017 USFS study.

The average daily visitor expenditures from the 2017 USFS study are shown in Figure 7, below. As the figure shows, non-local visitors spend money at a variety of local businesses including motels, campgrounds, grocery stores, restaurants, sporting goods and other retail stores, entertainment establishments, and gas stations. Average daily non-local visitor spending varies between a low of \$26 for day trip visitors to a high of \$157 for non-local overnight visitors (OVN) staying in some type of commercial accommodation. For overnight visitors, lodging, gas, groceries, and restaurants represent the largest portion of their spending.

Figure 7.
Visitor Spending Profiles Used in the Economic Impact Analysis of OMDPNM (2023 \$)

Note:

OVN-NF represents overnight visits with stays on public land; OVN represents overnight visits with stays in accommodation off public land.

Visitation for 2014 through 2016 was estimated using the average annual visitation growth rate between 2017 and 2022 to back-cast visitation between 2014 and 2016.

Source:

BBC Research & Consulting, 2023; White, Eric M. 2017. Spending patterns of outdoor recreation visitors to national forests. Gen. Tech. Rep. PNW-GTR-961. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 70 p.

| Spending Categories | Non-Local | | | Non-Primary |
|------------------------------|----------------|----------------|-----------------|-----------------|
| | Day | OVN-NF | OVN | |
| Motel | \$0.00 | \$10.00 | \$51.33 | \$35.67 |
| Camping | \$0.00 | \$10.38 | \$7.49 | \$4.19 |
| Restaurant | \$5.21 | \$9.49 | \$32.59 | \$29.24 |
| Groceries | \$4.20 | \$22.60 | \$20.61 | \$16.24 |
| Gas | \$12.34 | \$24.55 | \$28.29 | \$22.14 |
| Other transportation | \$0.04 | \$0.38 | \$0.76 | \$0.92 |
| Entry fees | \$1.67 | \$4.05 | \$2.60 | \$2.96 |
| Recreation and entertainment | \$1.26 | \$2.25 | \$4.61 | \$7.06 |
| Sporting goods | \$1.14 | \$3.91 | \$4.19 | \$2.58 |
| Souvenirs and other expenses | \$0.41 | \$2.02 | \$4.54 | \$5.95 |
| Total | \$26.27 | \$89.62 | \$157.00 | \$126.96 |

BBC combined the spending estimates in Figure 7 with the non-local visitation estimates in Figure 6 to estimate the total annual non-local spending that occurs within 50 miles of OMDPNM. Using these estimates, 2022 OMDPNM area non-local visitor spending is estimated to be about \$29.9 million. Figure 8 presents a cross-tabulation of spending by visit type. Because the economic model focuses on “new” money to the area, the model only used non-local visitor expenditures.

⁹ White, Eric M. 2017. Spending patterns of outdoor recreation visitors to national forests. Gen. Tech. Rep. PNW-GTR-961. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 70 p.

**Figure 8.
ODMPNM Non-Local
Visitor Spending
Estimates in 2022
(2023 \$)**

Note:

OVN-NF represents overnight visits with stays on public land; OVN represents overnight visits with stays in accommodation off public land.

Source:

BBC Research & Consulting, 2023.

| Spending Categories | 2022 | | | |
|------------------------------|-----------|-------------|-------------|-------------|
| | Day | OVN-NF | OVN | NP |
| Motel | \$0 | \$465,339 | \$4,066,792 | \$4,209,076 |
| Camping | \$0 | \$482,789 | \$593,373 | \$359,552 |
| Restaurant | \$257,589 | \$441,606 | \$2,582,440 | \$2,930,621 |
| Groceries | \$207,754 | \$1,051,665 | \$1,632,970 | \$1,459,804 |
| Gas | \$609,531 | \$1,142,406 | \$2,241,794 | \$1,860,975 |
| Other transportation | \$2,215 | \$17,450 | \$59,963 | \$104,691 |
| Entry fees | \$82,393 | \$188,229 | \$206,007 | \$219,107 |
| Recreation and entertainment | \$62,016 | \$104,701 | \$365,294 | \$642,875 |
| Sporting goods | \$56,258 | \$181,947 | \$331,818 | \$228,546 |
| Souvenirs and other expenses | \$20,155 | \$93,998 | \$359,408 | \$761,152 |

Figure 9 shows total spending across all non-local visit types from 2012 through 2022. Since the Monument was designated in 2014, non-local visitors to ODMPNM have spent a cumulative \$191 million in the study area, an average of \$21.2 million per year.

Figure 9.
Estimated Annual Organ Mountains–Desert Peaks National Monument Direct Visitor Expenditures by Category, by Year (\$, millions)

| Spending Categories | 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|
| Motel | \$8.74 | \$9.45 | \$4.23 | \$7.05 | \$5.93 | \$6.00 | \$5.66 | \$4.67 | \$3.85 | \$3.18 | \$2.62 |
| Restaurant | \$6.21 | \$6.72 | \$3.01 | \$5.01 | \$4.21 | \$4.27 | \$4.02 | \$3.32 | \$2.74 | \$2.26 | \$1.86 |
| Groceries | \$4.35 | \$4.70 | \$2.11 | \$3.51 | \$2.95 | \$2.99 | \$2.82 | \$2.33 | \$1.92 | \$1.58 | \$1.31 |
| Gas | \$5.85 | \$6.33 | \$2.83 | \$4.72 | \$3.97 | \$4.02 | \$3.79 | \$3.13 | \$2.58 | \$2.13 | \$1.76 |
| Other transportation | \$0.18 | \$0.20 | \$0.09 | \$0.15 | \$0.13 | \$0.13 | \$0.12 | \$0.10 | \$0.08 | \$0.07 | \$0.06 |
| Recreation and entertainment | \$1.17 | \$1.27 | \$0.57 | \$0.95 | \$0.80 | \$0.81 | \$0.76 | \$0.63 | \$0.52 | \$0.43 | \$0.35 |
| Sporting goods | \$0.80 | \$0.86 | \$0.39 | \$0.64 | \$0.54 | \$0.55 | \$0.52 | \$0.43 | \$0.35 | \$0.29 | \$0.24 |
| Souvenirs and other expenses | \$1.23 | \$1.33 | \$0.60 | \$1.00 | \$0.84 | \$0.85 | \$0.80 | \$0.66 | \$0.54 | \$0.45 | \$0.37 |
| Camping | \$1.44 | \$1.55 | \$0.69 | \$1.16 | \$0.97 | \$0.99 | \$0.93 | \$0.77 | \$0.63 | \$0.52 | \$0.43 |
| Total | \$29.99 | \$32.42 | \$14.52 | \$24.17 | \$20.34 | \$20.59 | \$19.42 | \$16.02 | \$13.22 | \$10.91 | \$9.00 |

Note: Dollar values adjusted for inflation and expressed in 2023 dollars.

Source: BBC Research & Consulting.

Annual Operations

The BLM allocates an operating budget to OMDPNM each year to pay for expenses related to staffing, operations, maintenance, and capital investment.¹⁰ The BLM Las Cruces Field Office employs an average of eight full-time staff to oversee both OMDPNM and Prehistoric Trackways National Monument. In addition to labor, the Monument’s budget also funds facility maintenance and improvements, site studies and inventories, and other non-labor activities. Between 2014 and 2020, the Monument’s operating budget ranged between a low of \$498,000 and a high of \$1.8 million, with an average annual budget of \$1.1 million. This compares to an operating budget of approximately \$200,000 per year prior to designation.¹¹

¹⁰ Barela, J. et al. 2014 – 2022. Organ Mountains-Desert Peaks Annual Manager’s Report. U.S. Department of Interior, Bureau of Land Management, Las Cruces District Office, Las Cruces, New Mexico.

¹¹ BBC Research & Consulting. 2013. Economic Impacts of National Monument Designation: Organ Mountains-Desert Peaks, New Mexico.

Grazing

The Monument also provides significant economic benefit to the community through ongoing livestock grazing. The presidential proclamation that established the Monument directed the BLM to continue making grazing leases available for local ranchers. Presently, the monument has 38 grazing allotments wholly or partially within its boundaries. The annual value of these allotments is approximately \$3.2 million. This amount includes the value of roughly 86,271 animal unit months (AUM) of forage permitted within the monument, where an AUM is the amount of forage needed to feed one animal for one month.¹² This compares with 81,435 AUMs of forage permitted on lands proposed for inclusion in the monument when the 2013 BBC study was conducted.

Total Operational and Visitor Spending

Combining annual direct operational spending by the BLM with annual grazing value and annual non-local visitor expenditures yields a combined annual direct economic impact of approximately \$34.4 million in 2022 compared to \$11.7 million in 2012. In cumulative terms, spending, operations, and grazing value associated with the Monument is equal to \$227 million. Figure 10 provides a summary table.

Figure 10.
Total Operational and Visitor Spending

Note: 1. Based on 2013 BBC Study; 2. Based on 2013 BBC Study
Dollar values adjusted for inflation and expressed in 2023 dollars.

Source:

BBC Research & Consulting, 2023.

| | 2012 | 2022 | Cumulative Total (2014 - 2022) |
|----------------------------------|---------------------|---------------------|-----------------------------------|
| Non-local Visitation | \$8,999,784 | \$29,988,562 | \$190,693,580 |
| Federal Expenditure ¹ | \$200,000 | \$1,172,716 | \$7,036,296 |
| Grazing ² | \$2,568,000 | \$3,254,142 | \$29,287,279 |
| Total | \$11,767,784 | \$34,415,420 | \$227,017,156 |

¹² Grazing economic impacts from Barela, J. et al. 2014 – 2022. Organ Mountains-Desert Peaks Annual Manager’s Report. U.S. Department of Interior, Bureau of Land Management, Las Cruces District Office, Las Cruces, New Mexico and the University of Wyoming Extension Office’s AUM Value Tool, available at: <https://uwyoextension.org/ranchtools/aum-value-tool/>

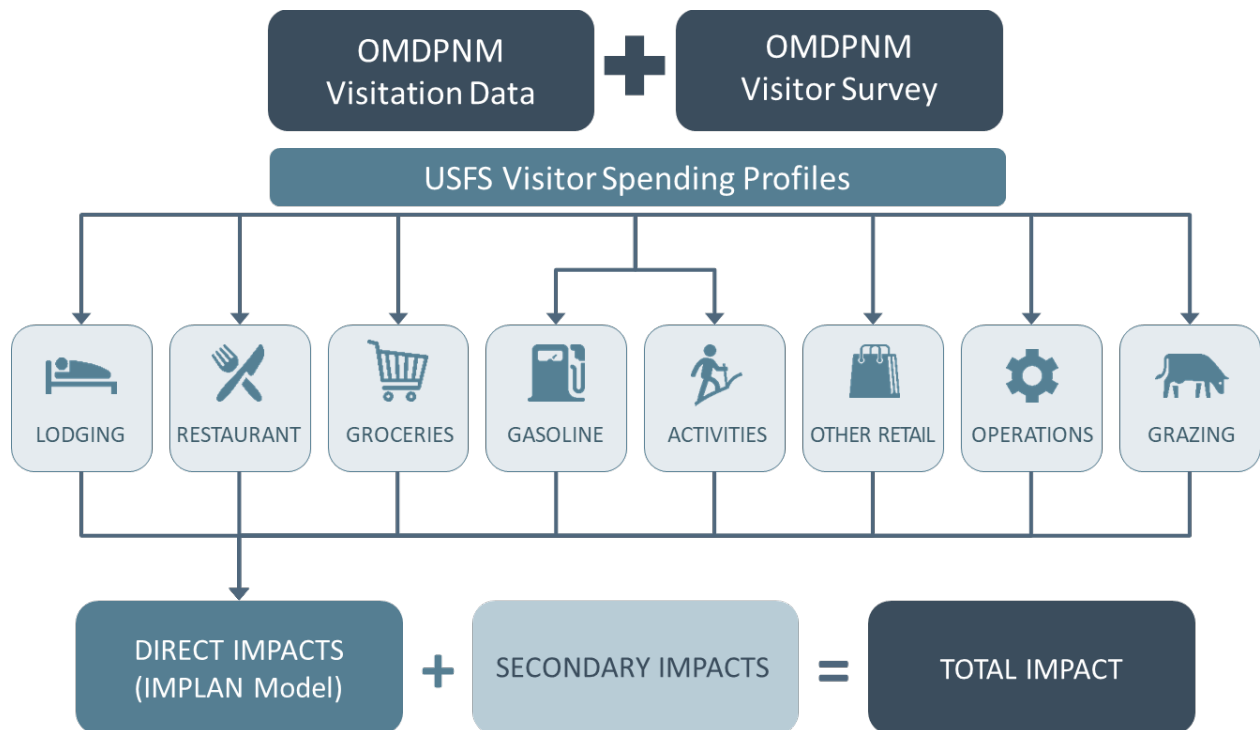
Spending Flow Model

The direct impact, discussed above, only represents a portion of the total impact of OMDPNM on the local economy. Spending generated by OMDPNM operations and non-local visitor expenditures circulates in the local economy, as businesses where visitors spend their money purchase goods and services from other businesses and as workers spend a portion of their earnings on local goods and services. This recirculation of money in the economy is termed a “secondary impact.” The direct and secondary economic impacts produced by OMDPNM non-local visitor and operational spending also support certain levels of employment, described later in this analysis.

For the purposes of this analysis, BBC defines the local economy as Doña Ana and Luna Counties in New Mexico. This study area was chosen because it is a functioning economic unit and will capture most monument-related impacts.

To determine the total economic impact of OMDPNM (the direct impact plus the secondary impacts), BBC developed a spending flow model—shown in Figure 11—to trace the flow of dollars and associated employment generated by OMDPNM through the local economy.

Figure 11.
Spending Flow Model



Source: BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System, 2023.

This model is based on the IMPLAN Regional Input-Output Modeling System. A widely used economic modeling software, IMPLAN estimates secondary economic impacts based on user-supplied direct impacts. BBC used IMPLAN to estimate economic, employment, and state and local tax revenue impacts based on the spending data discussed in the preceding section.¹³

¹³ For more information on IMPLAN, refer to <<http://implan.com/>>

Total Economic Impacts (2022)—Annual Operations and Visitation

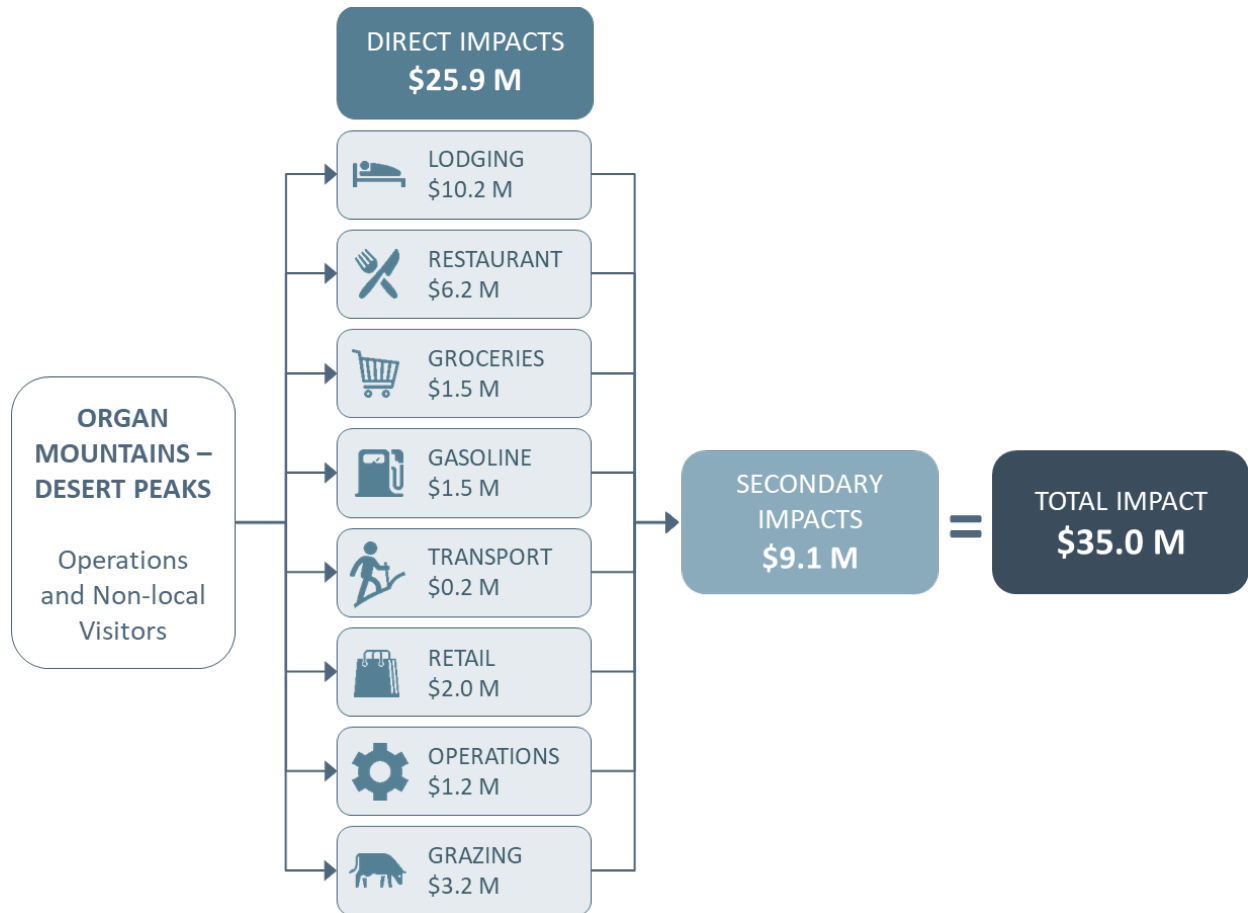
Current Economic Impact

Including direct and secondary impacts, OMDPNM currently has a total estimated economic impact of about \$35.0 million per year, as illustrated in Figure 12. This figure includes economic activity generated by annual non-local visitors, operation expenditures, and grazing gross revenues.

The direct impact number presented below in Figure 12 (\$25.9 million) differs from the spending numbers presented in Figure 10, above, because IMPLAN evaluates retail expenditures using retail margins rather than gross sales, as most products purchased at retail establishments are manufactured outside of Doña Ana and Luna Counties.¹⁴

¹⁴ When a product is bought through a retailer or wholesaler, the price paid by the buyer varies from the true producer price of the item. This difference is the result of incorporating expenses for transportation, wholesale and/or retail services, and other costs that make the item conveniently accessible to consumers. These additional expenses for transportation and the wholesale/retail services are referred to as margins. The summation of the producer price of an item and the margins constitutes the purchaser price or the overall revenue generated from the sale of the item. IMPLAN only includes the retailer's portion of the margin since the producer and wholesaler portions of price and paid to entities outside the study area and constitute a type of economic leakage.

Figure 12.
Organ Mountains–Desert Peaks National Monument, 2022 Total Annual Economic Impact, Doña Ana and Luna Counties, New Mexico



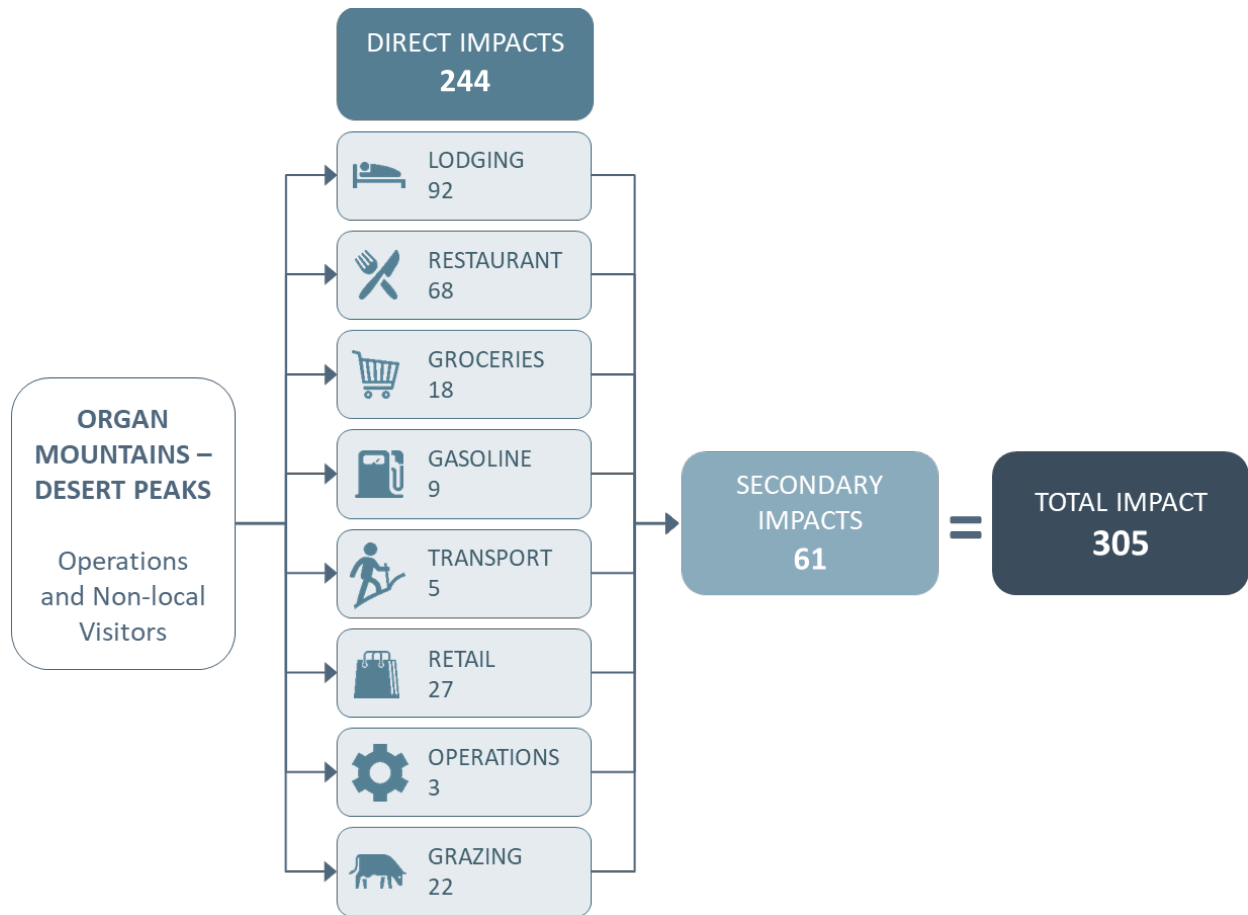
Note: Direct Expenditures reported net of taxes (sales, lodging and excise).

Source: BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.

Impact on Employment

Economic activity generated by OMDPNM visitation, operations, and grazing currently supports approximately 305 jobs per year in Doña Ana and Luna Counties, as shown in Figure 13. Most jobs supported by visitor spending are in hospitality and accommodations, food and beverage, and retail sales. Wages for specific occupations vary from about \$18,200 per year for food service workers to more than \$107,000 for retail sales managers. The average income across all 305 jobs supported by visitor spending is approximately \$40,400.

Figure 13.
Organ Mountains-Desert Peaks National Monument, 2022 Estimate Annual Employment Impact, Doña Ana and Luna Counties, New Mexico

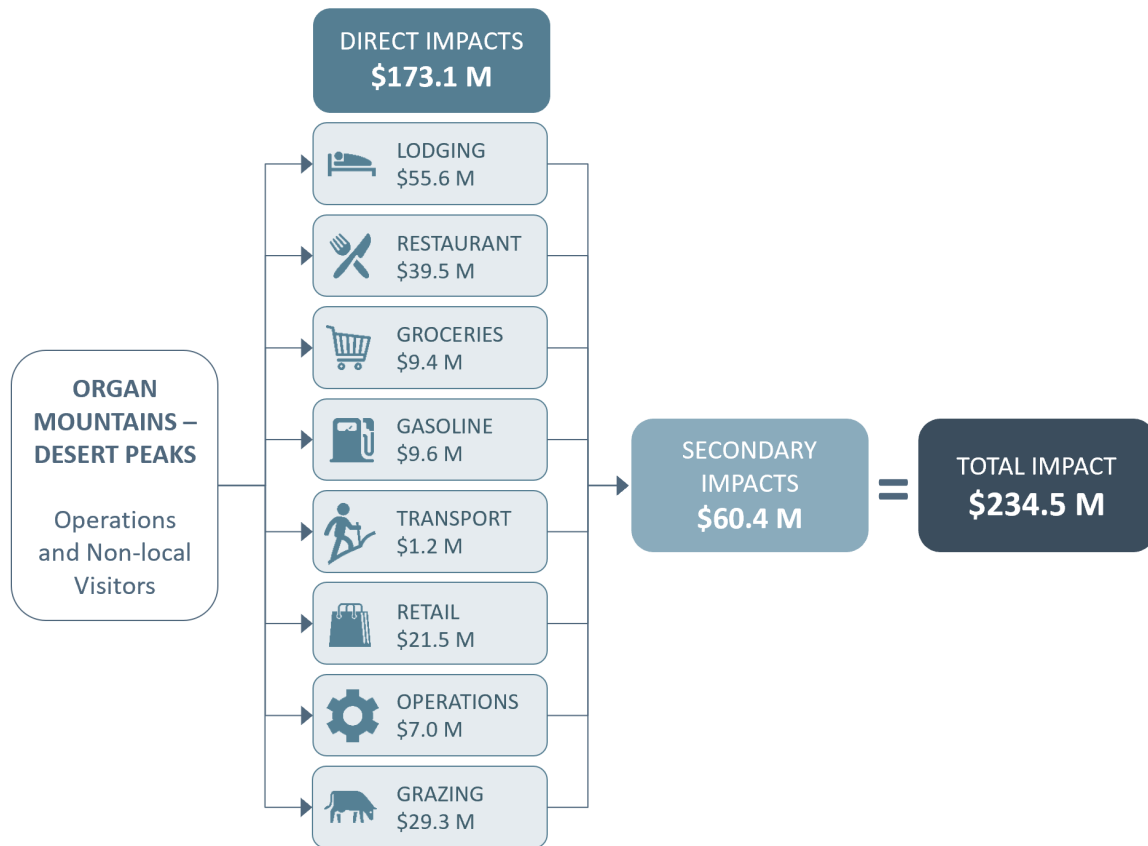


Source: BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.

Cumulative Economic Impact (2014 – 2022)

Since OMDPNM’s designation in 2014, spending by visitors and operations, and income from grazing, have added to a cumulative total of \$173.1 million, an average of about \$21.6 million per year. These direct impacts generated secondary impacts amounting to \$60.4 million, creating a total economic impact in Doña Ana and Luna Counties of approximately \$234.5 million (Figure 14).

Figure 14.
Organ Mountains–Desert Peaks National Monument, Cumulative Economic Impact (2014 – 2022), Doña Ana and Luna Counties, New Mexico



Note: Direct Expenditures reported net of taxes (sales, lodging and excise).

Source: BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.

Figure 15 shows the trend in economic output from 2012—prior to monument designation—through 2022 due to OMDPNM-related visitor spending. As the figure shows, economic output attributable to OMDPNM visitation has steadily increased from \$15 million in 2012 to \$35 million in 2022. Based on visitation and recreation trends over the past 10 years, the economic output attributable to OMDPNM is likely to continue growing into the future.

Figure 15.
Organ Mountains–Desert Peaks National Monument, Trends in Economic Output (2012 – 2022), Doña Ana and Luna Counties, New Mexico

Note: Monument designation was granted in May of 2014.

Source:
 BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.

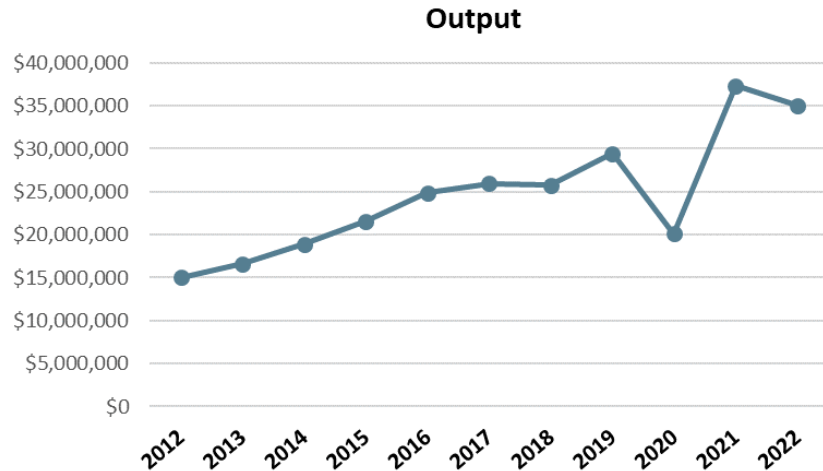
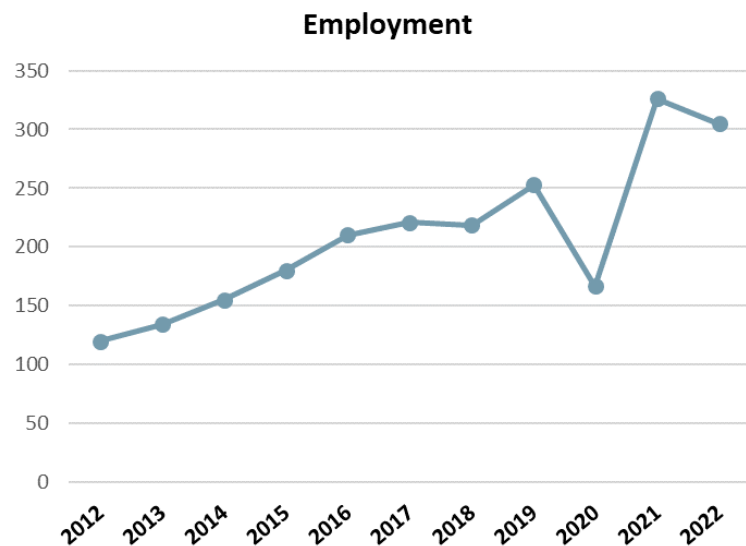


Figure 16 shows the trend in employment from 2012—prior to monument designation—through 2022 due to OMDPNM-related visitor spending. As the figure shows, employment attributable to OMDPNM visitation has tracked closely with economic output supported by visitation to the Monument. Between 2012 and 2022, the number of jobs supported by visitor spending more than doubled, from approximately 120 jobs in 2012 to 305 jobs in 2022. As visitation to the Monument grows, visitor spending will continue to support a growing number of jobs in the region.

Figure 16.
Organ Mountains–Desert Peaks National Monument, Trends in Employment (2012 – 2022), Doña Ana and Luna Counties, New Mexico

Note: Monument designation was granted in May of 2014.

Source:
 BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.



Fiscal Impacts

This section of the report details the current and cumulative fiscal impacts of OMDPNM on state, county, and local governments. Fiscal impacts are defined as the tax revenue generated by spending associated with OMDPNM non-local visitor spending.

Fiscal Impact Analysis Approach

Direct and secondary spending generated by non-local visitors to OMDPNM has a wide range of state, county, and local-level fiscal impacts. State, county, and local taxes are primarily driven by sales tax on visitor expenditures and income tax on jobs created by visitor spending. Other tax revenue sources include gasoline taxes, property tax, and motor vehicle tax.

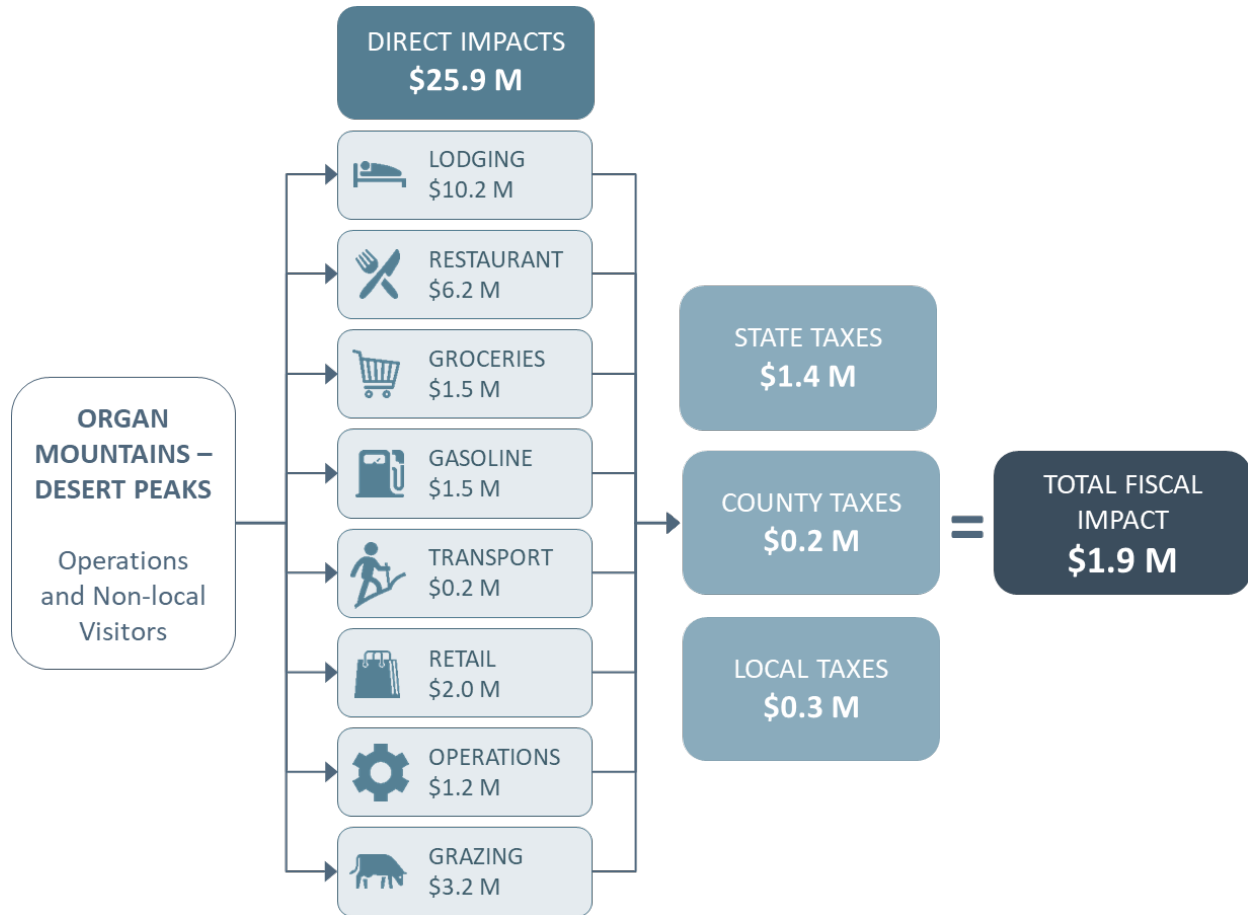
The IMPLAN economic modeling software package estimates the tax revenue impacts associated with all direct and secondary economic activity occurring in the study area.

Fiscal Benefits

In 2022, spending associated with OMDPNM operation and visitation generated about \$1.9 million in state, county, and local tax revenue. State taxes account for about \$1.4 million dollars of tax receipts, compared to \$200,000 in county tax receipts and \$300,000 in local tax receipts.

Figure 17 summarizes the total estimated state, county, and local tax revenue attributable to 2022 visitor spending, operations, and grazing at OMDPNM.

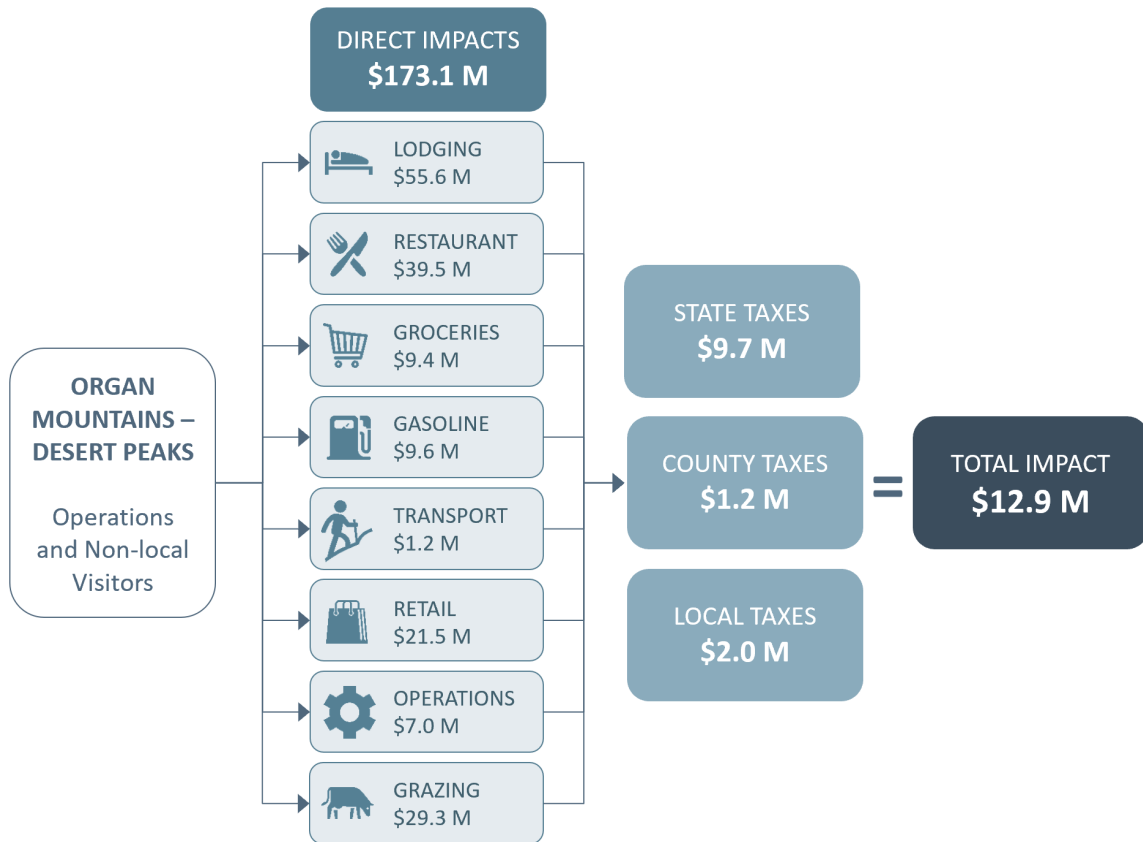
Figure 17.
Estimated Fiscal Impacts of OMDPNM on State, County, and Local Tax Revenues in 2022



Source: BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.

Figure 18 shows the cumulative tax revenue generated by OMDPNM since 2014 for state, county, and local governments. Since that time, spending associated with OMDPNM operation and visitation generated a cumulative total of \$12.9 million in revenue for these governments.

Figure 18.
Estimated Cumulative Fiscal Impacts of OMDPNM on State, County, and Local Tax Revenues (2014 – 2022)



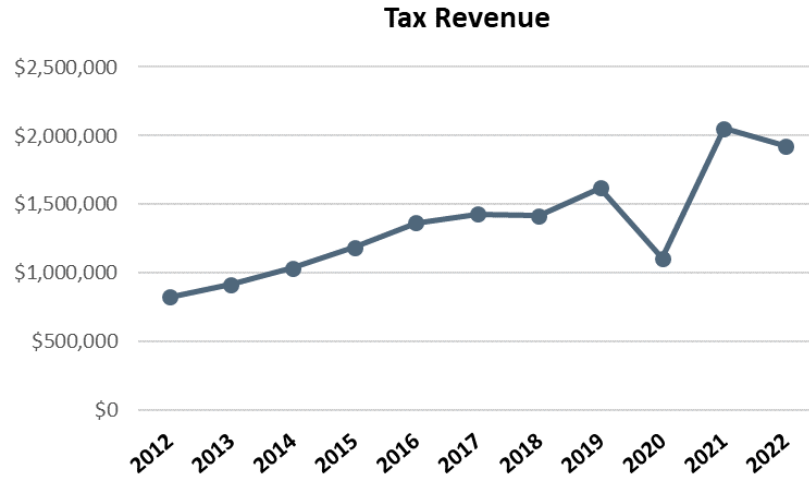
Source: BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.

Figure 19 shows the total tax revenue generated by OMDPNM for state, county, and local governments since 2014, but including the pre-monument designation period from 2012 through 2013. Tax revenues generated by OMDPNM operations and visitation have steadily grown from approximately \$0.8 million in 2012, before designation, to more than \$1.9 million in 2022.

Figure 19.
Estimated Fiscal Impacts of
OMDPNM on State, County,
and Local Tax Revenues (2012
– 2022)

Note: Monument designation was granted in May of 2014.

Source:
 BBC Research & Consulting, based on IMPLAN
 Regional Input-Output Modeling System.



Comparison with Previous Projections

In 2013—prior to the establishment of the Organ Mountains–Desert Peaks National Monument on May 21, 2014—BBC conducted a study to provide interested parties with information about the characteristics of the ODMP area and the projected economic impacts associated with its potential designation as a National Monument.

BBC projected how visitation was expected to change post-designation and estimated about 189,000 non-locals would visit the monument each year. These projections were multiplied by the expected spending from each visitor to estimate the direct economic impact that non-local visitation would have on the regional economy.

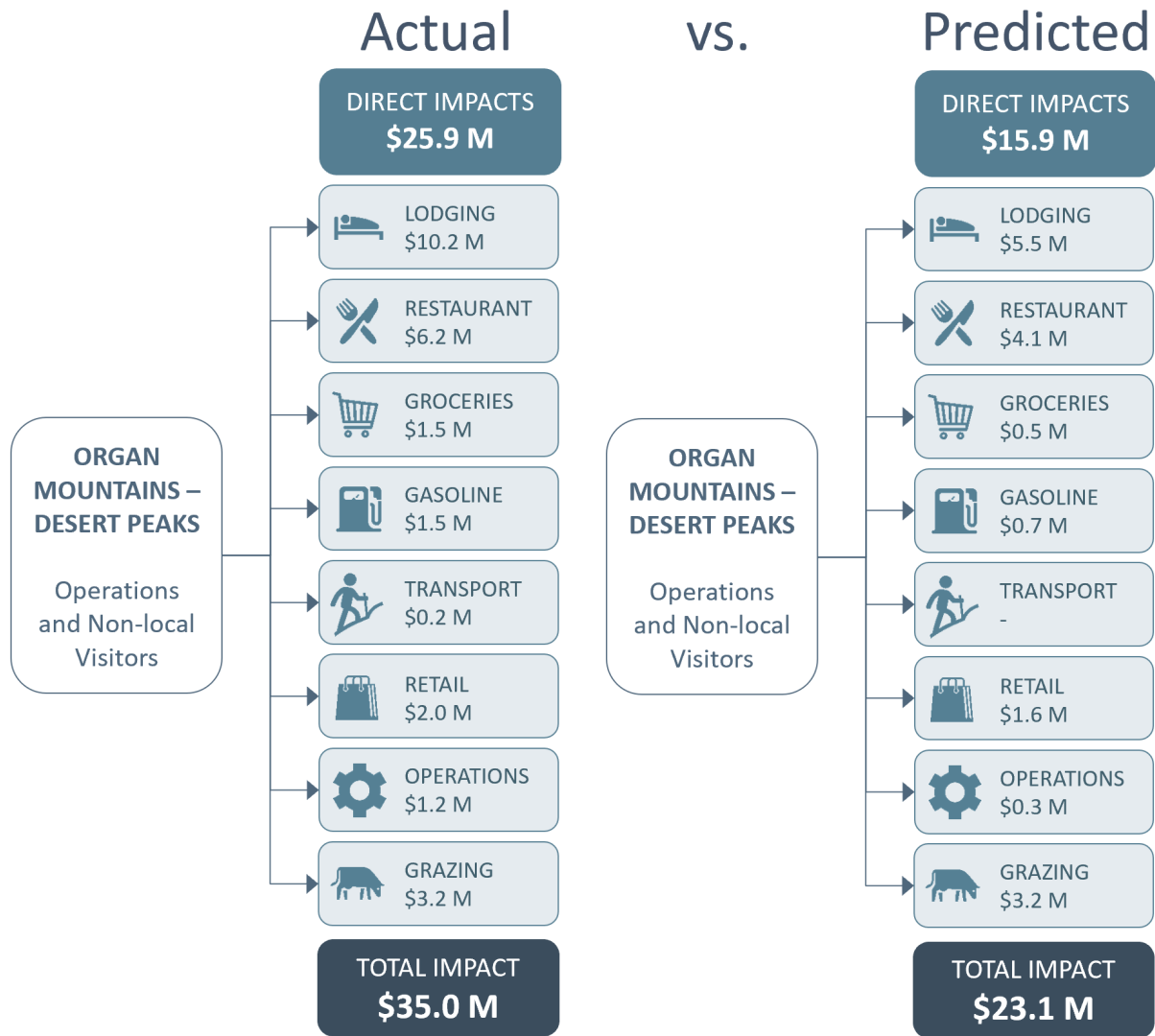
The results from the previous study were entered into the IMPLAN model. In total, the 2013 study estimated that direct spending associated with visitation and operations at the proposed monument would equate to about \$15.9 million in 2023 dollars, generating a total economic output of \$23.1 million.

Results from this current study show that OMDPNM's economic impacts on the surrounding region have surpassed the original expectations (Figure 20). Based on 2022 visitation, BBC estimated that about 239,000 non-locals visited OMDPNM, spending approximately \$25.9 million in the study area. This direct spending, combined with operations spending, generated a total economic output of \$35.0 million, approximately 51 percent more than the economic impact projected in the 2013 BBC study.

BBC also estimated the fiscal impacts that the monument designation would have on state, county, and local tax revenue collections. The 2013 study estimated that non-local visitor spending would generate about \$1.4 million in tax revenues in 2023 dollars, while this study showed that non-local visitor spending is generating more than \$1.9 million dollars in tax revenues for state, county, and local governments.

The results show that OMDPNM has become a significant driver of economic activity in Doña Ana and Luna Counties and will continue to make important economic contributions to the regional economy for decades to come.

Figure 20.
Comparison of Actual and Predicted Economic Impacts of OMDPNM (2023 \$)



Source: BBC Research & Consulting, based on IMPLAN Regional Input-Output Modeling System.

Success Factors of OMDPNM

The Organ Mountains–Desert Peaks National Monument has been more successful at generating economic impacts than initial estimates suggested. Visitation to the Monument has exceeded the projections put forward in BBC’s 2013 study, which estimated that monument designation would increase visitation by about 51 percent. Visitation actually increased by a factor of three, from 183,900 visitors in 2013 to 612,781 in 2022. The increased visitation has brought increased spending to the region, which has boosted the regional economy by tens of millions of dollars per year as discussed above.

Part of the reason the OMDPNM has been so successful at attracting visitors is due to the value of the National Monument brand. National Monument designation conveys information to potential visitors about the quality of amenities and resources at the site. As Figure 21 shows, below, National Monuments and National Parks are regarded as the highest indicators of site quality amongst public land designations. The designation raises the profile of the site and as a result, visitors place a higher priority on visiting in addition to being willing to spend more during their visit.

Figure 21.
Public Land
Designations, Quality
Perceptions, and
Value to Visitors

Source:
S.A. Cline et al. 2011. The value of
a name: Estimating the economic
impact of public land
designation. *The Social Science*
Journal, 48(4).



Visit Las Cruces, a tourism ambassador program run by the City of Las Cruces, capitalized on the National Monument value with a series of events designed to raise OMDPNM’s profile and raise awareness of the site for potential visitors. The first event was a one-year anniversary celebration of the Monument’s designation. As part of the celebration, a first-of-its kind OMDP Girl Scout Patch was unveiled.

Visit Las Cruces built on that event’s success with the Monuments to Main Street (M2M) month, started in 2017, to celebrate OMDP becoming a National Monument. The M2M event brought a coalition of groups together—including the Las Cruces Green Chamber of Commerce, Las Cruces Convention and Visitors Bureau, Friends of OMDP, and New Mexico Wild—to plan the event, which takes place every September. It also was instrumental in working with local outdoor outfitters to launch new Monument tours. The event, which includes Yoga on the Monument, hiking trips, stagecoach rides, flyovers of historic sites, music, and other events, is also marketed by Visit Las Cruces.

OMDPNM's designation also raised the profile of south-central New Mexico by creating an additional amenity to draw visitors, new employers, and emerging industries like film production to the area. The OMDPNM adds to the existing wealth of attractions in the region. Along with White Sands and Prehistoric Trackways National Monuments, which draw visitation and economic activity to the region, the addition of OMDPNM provides visitors with an opportunity to visit multiple monuments in one visit.

OMDPNM's proximity to local communities, including Las Cruces, Deming, and Hatch, allows the region to capture the benefit of Monument visitation by offering visitors opportunities to patronize local businesses for suppliers, services, lodging, and entertainment. In addition, the scale of visitation has likely incentivized additional private investment such as the establishment of new restaurants and hotels, spurring greater economic impact than this report projects.