OIL AND GAS LEASING

BLM Should Update Its Guidance and Review Its Fees
OIL AND GAS LEASING

BLM Should Update Its Guidance and Review Its Fees

What GAO Found

The Department of the Interior’s Bureau of Land Management (BLM), which leases federal lands for oil and gas development, has changed some of its leasing policies. For example, starting in fiscal year 2015, BLM was authorized to use online auctions, instead of in-person auctions, to award leases. In 2016, BLM launched an online system for submitting and processing nominations of lands for leasing. However, all of the agency’s guidance documents for oil and gas leasing that GAO reviewed were out of date and did not fully reflect these changes, though agency policy requires guidance be updated promptly. Unless BLM reviews and revises its process for updating its guidance, the agency’s outdated guidance may continue to lead to inefficiencies for industry and BLM state office staff that spend extra time interpreting outdated BLM guidance.

Parties, such as oil and gas companies, leased a small portion of lands nominated for onshore oil and gas leasing from 2009 through 2019, when about 87 million acres were nominated and about 14 million acres were leased (see figure).

BLM has not fully reviewed its application fees for oil and gas leases since 2005 despite changes to leasing that could affect program costs, such as the move from in-person to online auctions. BLM has conducted biennial reviews of its existing fees, but these reviews do not assess all of the costs the fees were intended to recover. Until BLM revises its approach to examine all relevant costs and adjusts fees accordingly, the agency may collect too much or too little in fees. In addition, BLM does not charge a fee to nominate lands for leasing and has not re-examined whether to charge such a fee since 2014. Without doing so, BLM risks continuing to expend resources to process nominations that do not result in leases. In addition, the agency may not strike the appropriate balance between encouraging nominations and controlling costs.

What GAO Recommends

GAO is making four recommendations, including that BLM (1) review and adjust its approach for updating agency guidance; (2) revise its approach to biennial fee reviews to include all relevant costs, and adjust fees accordingly; and (3) re-examine whether to charge parties a fee for nominating lands for oil and gas development. Interior agreed with GAO’s recommendations.

View GAO-22-103968. For more information, contact Frank Rusco at (202) 512-3841 or RuscoF@gao.gov.

Source: GAO analysis of Bureau of Land Management (BLM) data. | GAO-22-103968

---

Acreage Nominated, Offered for Lease, and Leased for Federal Onshore Oil and Gas Development, 2009 through 2019

| Nominated: 87 million acres |
| Not offered at auction: 69 million acres |
| Offered at auction: 18 million acres |
| Not leased: 4 million acres |
| Leased: 14 million acres |

Source: GAO analysis of Bureau of Land Management (BLM) data. | GAO-22-103968
Contents

Letter

Background
BLM Has Changed Some Policies for Issuing Oil and Gas Leases since 1987 but Has Not Kept Related Guidance Up to Date 11
Operators Leased a Small Portion of Acres Nominated, and Most Competitive Leases Far Outperformed Noncompetitive Leases 17
BLM Has Not Recently Reviewed Its Application Fees in Response to Changing Conditions 24
Conclusions 29
Recommendations for Executive Action 30
Agency Comments 31

Appendix I  Objectives, Scope, and Methodology 32

Appendix II  Additional Information on the Performance of Competitive and Noncompetitive Leases 40

Appendix III  Comments from the Department of the Interior 44

Appendix IV  GAO Contact and Staff Acknowledgments 46

Tables

Table 1: BLM Oil and Gas Leasing Guidance Documents and Subsequent Instruction Memorandums That Have Changed the Oil and Gas Leasing Process 14
Table 2: Information on Nominated Acreage for Onshore Oil and Gas Leasing Received by BLM State Offices and Offered at Competitive Lease Auction, 2009 through 2019 19
Table 3: Leasing Outcomes of Onshore Oil and Gas Leasing Acreage Offered at Competitive Lease Auction by BLM State Offices, 2009 through 2019 20
Table 4: Leasing Outcomes of Onshore Oil and Gas Nominated Acreage by BLM State Offices, 2009 through 2019 25
Table 5: Average Primary-Term Revenues per Acre from Noncompetitive Leases and Competitive Leases Acquired
Table 6: Average Primary-Term Revenues per Acre for Competitive Leases with Bonus Bids of $2 to $100 and Competitive Leases with Bonus Bids Greater than $100 for Leases that Started in Fiscal Years 2003 through 2009, by Type of Revenue and BLM State Office

Figures

Figure 1: Boundaries of the 12 Bureau of Land Management State Offices, as of November 2021
Figure 2: Overview of Bureau of Land Management Oil and Gas Leasing Process
Figure 3: Annual Acreage of Federal Competitive and Noncompetitive Oil and Gas Leases Issued in Fiscal Years 1989 through 2019
Figure 4: Acreage Nominated, Offered for Lease, and Leased for Federal Onshore Oil and Gas Development, 2009 through 2019
Figure 5: Average Primary-Term Revenue per Acre for Federal Oil and Gas Leases that Started in Fiscal Years 2003 through 2009, by Lease Type and Bonus Bid Amount
Figure 6: Cumulative Percentage of Federal Oil and Gas Leases Terminated during Their 10-Year Primary Term for Competitive Leases with Various Bonus Bids and Noncompetitive Leases that Started in Fiscal Years 1987 through 2009
Figure 7: Average Royalties per Acre from the Decade after Primary Term for Federal Oil and Gas Leases that Started in Fiscal Years 1993 through 1999, by Lease Type and Bonus Bid Amount
Abbreviations

BLM  Bureau of Land Management
CFO Act  Chief Financial Officers Act of 1990
EA  Environmental Assessment
EIS  Environmental Impact Statement
IM  Instruction Memorandum
Interior  U.S. Department of the Interior
LR2000  Legacy Rehost System 2000
MRMSS  Minerals Revenue Management Support System
NEPA  National Environmental Policy Act of 1969
NFLSS  National Fluids Lease Sale System
OMB  Office of Management and Budget
ONRR  Office of Natural Resources Revenue
Reform Act  Federal Onshore Oil and Gas Leasing Reform Act of 1987

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.
November 9, 2021

The Honorable Catherine Cortez Masto
Chair
Subcommittee on Public Lands, Forests, and Mining
Committee on Energy and Natural Resources
United State Senate

The Honorable Richard Blumenthal
United State Senate

The Honorable Edward J. Markey
United State Senate

The Honorable Jacky Rosen
United State Senate

In 2018, the Bureau of Land Management (BLM) within the Department of the Interior held a competitive auction for oil and gas leases on about 300,000 acres of federal land in Nevada, but did not receive any bids. Earlier, in 2014, BLM received nominations requesting it to make available 28 million acres of land in Nevada—almost half of the acreage of the entire state—for oil and gas leasing but very little of this land was ultimately leased. These and other experiences have raised concerns among various stakeholders, including members of Congress, environmental groups, and the oil and gas industry about BLM's process for oil and gas leasing. In particular, some stakeholders have suggested that the federal government is wasting resources processing nominations in some cases where there is little or no potential for oil or gas development. In January 2021, the Administration directed the Secretary of the Interior to begin a comprehensive review and reconsideration of oil and gas leasing on federal lands.

BLM manages onshore oil and gas development on federal lands with the goals of facilitating safe and responsible energy development while providing a fair return for the American taxpayer, according to BLM. BLM's current leasing process—the process from nominations through lease issuance—was largely established with the Federal Onshore Oil
and Gas Leasing Reform Act of 1987 (the Reform Act). Through this process, the public can nominate specific public lands that BLM should consider including in an auction of leases for the rights to develop oil and gas on that land. BLM’s state offices review these nominated lands to determine their eligibility for leasing, and to assess potential environmental impacts of oil and gas development on the land, among other things. Based on its review, BLM then holds competitive auctions where leases are offered to the highest bidder as long as the highest bid is equal to or exceeds a minimum bid of $2 per acre. If the leases are not acquired at auction, they can be acquired noncompetitively on a first-come, first-served basis for a period of 2 years. For both competitive and noncompetitive leases, BLM charges operators a one-time lease application fee to help defray some of the costs of leasing and does not charge any other fixed fees related to the leasing process from nominations through lease issuance.

You asked us to review oil and gas leasing on federal lands. This report examines: (1) changes to BLM’s policies for oil and gas leasing since 1987, (2) leasing outcomes and the performance of competitive and noncompetitive leases, and (3) the extent to which BLM has reviewed fees for oil and gas leasing in response to changing conditions.

1BLM’s current leasing processes were established under the Mineral Leasing Act of 1920, as amended. The Reform Act amended the Mineral Leasing Act of 1920.

2For the purposes of this report, we use the term “nominations” to describe Expressions of Interest and Presale Noncompetitive Offers. Expressions of Interest are informal nominations and are the most frequent form of nominations BLM receives for oil and gas leasing. A presale noncompetitive offer is a formal nomination in which a nominator pays in advance to acquire a lease noncompetitively if no bid is received at a competitive auction. Under BLM’s current regulations, BLM can also submit a Bureau Motion to identify lands for oil and gas leasing and nominate them for an upcoming lease sale. According to BLM data, Bureau Motions and presale noncompetitive offers accounted for less than 1 percent of total nominations submitted to BLM from 2018 through 2020; Expressions of Interest accounted for about 99.6 percent of nominations submitted during this time period.

3For the purposes of this report, we refer to oil and gas companies that obtain competitive and noncompetitive leases as operators. According to BLM officials and documents, the application fee is intended to recover relevant costs of certain activities from nomination through lease issuance that BLM determined should be recovered through these fees. BLM officials stated that one additional fee titled “leasing under right of way” relates to the oil and gas leasing process through lease issuance; however, this fee is for leasing under a different process than that established by the Reform Act and is therefore outside of the scope of our review.
To describe the changes to BLM’s policies for oil and gas leasing since 1987, we reviewed BLM regulations, handbooks, and other documents to identify and describe the steps in BLM’s leasing processes, and any changes to these processes since 1987, when Congress passed the Reform Act. We compared BLM’s guidance documents to BLM’s Directives Manual, which provides policy for updating its guidance.

To examine leasing outcomes and performance of competitive and noncompetitive leases, we analyzed data from several Interior databases including nomination and leasing information from BLM’s Oil and Gas Statistics. We also used data on the revenue generated for different types of leases from Interior’s Office of Natural Resources Revenue (ONRR) from fiscal years 2003 through 2019. We assessed the reliability of BLM and ONRR data by performing electronic testing, reviewing existing information about the data and systems that produced them, and interviewing agency officials knowledgeable about the data. We determined that the data were sufficiently reliable for the purposes of our reporting objectives.

To evaluate the extent that BLM has reviewed fees for oil and gas leasing in response to changing conditions, we analyzed documentation on how BLM established and has reviewed its fees, and related laws and regulations. In particular, we compared BLM’s actions to review its application fees to the Office of Management and Budget (OMB) Circular No. A-25 and the Chief Financial Officers Act of 1990 (CFO Act). We also compared BLM’s actions to OMB Circular No. A-25 and the CFO Act to assess the extent that BLM reviewed the need for a nomination fee. To provide context for how much of BLM’s leasing costs are recovered through its application fees, we analyzed information on BLM’s costs and fee receipts from BLM’s financial management system. We determined that the data were sufficiently reliable for the purposes of our reporting objectives.

For all objectives, we interviewed officials from a non-generalizable sample of six of BLM state offices (Colorado, Montana/Dakotas, Nevada, New Mexico, Utah, and Wyoming) selected based on such factors as the

---

4ONRR collects, accounts for, and verifies natural resources and energy revenues. As a part of its duties, ONRR manages the collection and disbursement of revenues associated with leased oil and gas parcels.

amount of acres nominated and leased in their areas of jurisdiction. Together, these six BLM state offices represent about 96 percent of acres nominated for oil and gas leasing from 2006 through 2018 and about 94 percent of all leased acreage issued from 2009 through 2019. We also interviewed officials from BLM headquarters, two stakeholder groups, and state oil and gas offices from Texas and New Mexico. A more detailed discussion of our scope and methodology is presented in appendix I.

We conducted this performance audit from December 2019 to November 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

---

### Background

<table>
<thead>
<tr>
<th>BLM’s Mission and Organizational Structure</th>
</tr>
</thead>
</table>
| BLM manages federal lands for multiple uses, as defined in the Federal Land Policy and Management Act of 1976, as amended, including recreation, grazing, timber, minerals, watershed, wildlife and fish, natural scenic, scientific and historical preservation, and the sustained yield of renewable resources. BLM’s mission is to maintain the health, diversity, and productivity of these public lands for the use and enjoyment of present and future generations. As a part of this mission, BLM is responsible for offering and issuing leases for private entities to develop oil and gas resources on roughly 700 million acres of (1) BLM-managed land, (2) lands managed by other federal agencies, and (3) nonfederal land where the federal government owns the mineral rights.

BLM administers its oil and gas program through its headquarters office in Grand Junction, Colorado; 12 state offices; and field offices across those states. BLM state and field offices manage and implement BLM’s oil and gas leasing process within their boundaries, including reviewing... |

---

6We excluded BLM’s Alaska state office from the scope of this report because the BLM Alaska state office conducts leasing under different regulations than the other BLM state offices. Lands in BLM Alaska’s National Petroleum Reserve and Coastal Plain are leased under regulations at 43 C.F.R. Part 3130.

7While BLM provides technical assistance to Indian tribes and individual mineral owners, BLM does not manage leasing on Indian lands.
nominated lands and preparing for lease auctions. Figure 1 shows the boundaries of the 12 BLM state offices, which generally conform to the boundaries of one or more states.

Figure 1: Boundaries of the 12 Bureau of Land Management State Offices, as of November 2021

---

Because BLM manages few acres of land in the eastern half of the United States, the Eastern States state office, in Washington, D.C., is responsible for managing land in 31 states.
### Federal Onshore Oil and Gas Lease Terms, Conditions, and Revenues

Operators that obtain leases from BLM are granted exclusive rights to explore, develop, produce, and sell oil and gas from leased lands. Federal onshore oil and gas leases are granted for a primary period of 10 years, but this term may be extended if the lease produces oil or gas in paying quantities or for other reasons.

The federal government collects revenues from oil and gas leases under terms and conditions that are specified in the lease. In addition to collecting bids on parcels of land at or above the minimum acceptable bid—called bonus bids—for competitive leases acquired at auction, the government also collects annual rents, royalties, and application fees:

- **Rents.** Operators pay rent annually at a fixed rate until production begins on the leased land or, if no production occurs, until the end of the primary period specified in the lease—typically 10 years. For federal onshore oil and gas leases, the rental rate is generally $1.50 per acre for the first 5 years and $2 per acre each year thereafter. BLM terminates leases prior to the end of their primary terms if operators fail to make proper and timely annual rental payments.\(^9\)

- **Royalties.** Once production of oil or gas in paying quantities starts on a lease, operators pay the federal government royalties of at least 12.5 percent of the net value of production removed or sold from the lease minus allowable deductions for the transportation costs of oil or gas or processing costs for gas.\(^{10}\)

---

\(^9\)Specifically, rental payments are due until the operator develops a well capable of production in paying quantities. In addition to lease terminations, leases can also be relinquished or cancelled before the 10-year term ends at the request of the operator or for other reasons.

\(^{10}\)Until January 2017, BLM regulations generally established a fixed royalty rate of 12.5 percent. BLM, "Minerals Management; General Oil and Gas Leasing; Noncompetitive Leases: Competitive Leases: Oil and Gas Leasing—National Petroleum Reserve—Alaska: Onshore Oil and Gas Operations: Onshore Oil and Gas Unit Agreements—Unproven Areas: Geothermal Resources Leasing; General: Geothermal Resources Unit Agreements—Unproven Areas; Final Rule," 53 Fed. Reg. 22814, 22838 (June 17, 1988) (revised § 3103.3-1). In November 2016, BLM issued regulations to provide BLM with the flexibility to set royalty rates at or above 12.5 percent. This rule became effective in January 2017. Department of the Interior, BLM, "Waste Prevention, Production Subject to Royalties, and Resource Conservation, Final Rule," 81 Fed. Reg. 83008 (Nov. 18, 2016). In spring 2020, BLM created emergency guidance related to COVID-19, which stated that royalty rates may be temporarily reduced to no lower than 0.5 percent from March through June 2020. For more information on BLM’s royalty relief policy, see GAO, Federal Oil and Gas Revenue: Actions Needed to Improve BLM’s Royalty Relief Policy, GAO-21-169T (Washington, D.C.: Oct. 6, 2020).
• **Application Fees.** BLM, through the Secretary of the Interior, is authorized to establish fees for applications and other documents related to oil and gas leasing.11 BLM charges a one-time application fee for both competitive and noncompetitive oil and gas leases at the time the lease is acquired, and these fees are annually adjusted for inflation. The fiscal year 2022 application fees for oil and gas are $175 for competitive leases and $450 for noncompetitive leases.

---

**BLM Uses a Multi-step Oil and Gas Leasing Process**

The 1987 Reform Act changed BLM’s processes for issuing leases by requiring that all public lands available for oil and gas leasing be offered first through a competitive process.12 Since the Reform Act, BLM has used a multi-step process for nominations and for issuing leases for oil and gas development on federal lands.13 The agency’s current process allows the public to nominate, free of charge, parcels of land for consideration in an upcoming lease auction using its National Fluids Lease Sale System (NFLSS), a publicly accessible, online system for submitting and processing nominations.14 After BLM receives a nomination, BLM reviews and decides whether to offer parcels for leasing by determining a parcel’s eligibility, conducting environmental reviews, and inviting the public to comment on proposed parcels for lease, among other things. However, BLM does not perform an assessment of the development potential for a parcel. After this review, BLM auctions the parcels for lease under a competitive bidding process. If the tract of land

---


12Prior to the 1987 Reform Act, under the Mineral Leasing Act of 1920, as amended, BLM had a competitive leasing process for oil and gas leasing but was allowed to noncompetitively lease lands that were not within a known geologic structure. According to our prior work, before the 1987 Reform Act, more than 95 percent of onshore leases were issued noncompetitively. See GAO, *Mineral Revenues: Implementation of the Federal Onshore Oil and Gas Leasing Reform Act of 1987*, GAO/RCED-89-108 (Washington, D.C.: May 8, 1989).

13In addition to the leasing process we describe, there are other processes under the Mineral Leasing Act of 1920 for specific categories of onshore leasing of federal lands and minerals, such as for oil shale. These other processes are outside the scope of our review.

14According to BLM officials, once the public submits a nomination using NFLSS, BLM officials can use the system to send messages to nominators, such as to clarify information that may have been unclear in the nomination. BLM also updates NFLSS with status codes for each nomination to provide more information about the nomination’s place in BLM’s review process to external users.
does not receive an adequate bid of at least $2 per acre at the lease auction, the land is made available for 2 years to be leased noncompetitively.\textsuperscript{15} Figure 2 illustrates BLM’s oil and gas leasing process.

\textsuperscript{15} Competitive leases are limited in size to 2,560 acres (excluding Alaska), and noncompetitive leases have a maximum lease acreage size of 10,240 acres. According to BLM guidance, those interested in noncompetitive leases are able to combine several parcels that did not sell at auction within the past two years. Additionally, if more than one individual is interested in a noncompetitive lease the day after a lease auction, BLM holds a random drawing to determine who is awarded the lease.
The public protest period is 30 days.

Since BLM began using the multi-step leasing process under the 1987 Reform Act, the total acreage of new oil and gas leases issued each year has varied. In fiscal year 1989, BLM issued new oil and gas leases for around 6.7 million acres. In fiscal year 2019, the acreage of new leases BLM issued decreased to around 2 million acres, and over time there...
were variations in the annual acreage of new leases, as shown in figure 3. Additionally, the share of newly leased acreage that was noncompetitively obtained decreased from 57 percent in fiscal year 1989 to 15 percent in fiscal year 2019. Several BLM state office officials said that the reason for the decrease may be that the most attractive federal lands were already leased and that the remaining federal lands had lower development potential.

**Figure 3: Annual Acreage of Federal Competitive and Noncompetitive Oil and Gas Leases Issued in Fiscal Years 1989 through 2019**

Acreage (in millions)


Fiscal year

<table>
<thead>
<tr>
<th>Year</th>
<th>Competitive</th>
<th>Noncompetitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>1990</td>
<td>6.5</td>
<td>0.5</td>
</tr>
<tr>
<td>1991</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>1992</td>
<td>5.5</td>
<td>0.5</td>
</tr>
<tr>
<td>1993</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>1994</td>
<td>4.5</td>
<td>0.5</td>
</tr>
<tr>
<td>1995</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>1996</td>
<td>3.5</td>
<td>0.5</td>
</tr>
<tr>
<td>1997</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1998</td>
<td>2.5</td>
<td>0.5</td>
</tr>
<tr>
<td>1999</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>2000</td>
<td>1.5</td>
<td>0.5</td>
</tr>
<tr>
<td>2001</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2002</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>2003</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Bureau of Land Management (BLM) data. GAO-22-103968

Note: Acreage is based on all competitive and noncompetitive leases that the BLM issued through processes established in the Federal Onshore Oil and Gas Leasing Reform Act of 1987.
BLM has made some changes to its leasing processes since 1987, such as introducing online tools and changing its application fees for leasing lands, but BLM has not kept its relevant guidance documents up to date to reflect these and other changes. BLM’s policy requires that guidance be updated promptly. Similarly, BLM developed a new online system for submitting and processing nominations, but has not issued detailed guidance to help users understand the new system despite policy requiring it to do so.

We identified four handbooks and one manual relevant to BLM’s oil and gas leasing process. The current versions of these five documents were issued between 1994 and 2013, and they reflect some changes in BLM’s leasing processes since 1987. For example, the documents

reflect BLM’s requirement that all public lands that are available for oil 
and gas leasing be offered first through a competitive auction process, 
and
set up procedures for conducting competitive auctions and leasing.

However, BLM has not updated these handbooks and other guidance to 
reflect more recent changes to its leasing process. In effect, BLM staff are 
to rely on handbooks and manuals except for where these have been 
supplanted by subsequently issued regulations or instruction 
memorandums. (We did not assess whether BLM staff appropriately 
determine which parts of the handbooks and manuals to rely on.) The 
following are examples of elements of the handbooks and manual that 
have been changed:

• In 2005, BLM raised its application fees for noncompetitive leases 
from $75 to $335. However, BLM did not make that change in its 1994 
noncompetitive leasing handbook, which still reflects the $75 fee. 
Although BLM officials currently use this outdated handbook to 
manage other aspects of noncompetitive leasing, BLM charges filers 
its most recent application fee, which was adjusted for inflation in 
fiscal year 2022 to $450.17

• In 2007, BLM issued a memorandum directing BLM officials to accept 
updated forms for applications of leases to BLM. BLM updated these 
forms to meet standards for filings made in U.S. District Courts.18 
However, BLM did not change its 1994 noncompetitive leasing 
handbook, which continues to direct BLM officials to accept an 
outdated form.

• In fiscal year 2015, BLM was authorized to use online auctions 
instead of in-person auctions. However, BLM did not change its 2013

Per 43 C.F.R. § 3000.12(a), BLM is to update these application fees annually for inflation.

18In 2006, BLM changed its Form 3100-11 to meet standards for filings made in the United 
States District Courts. BLM lengthened the form to several pages in order to downsize 
from legal-size paper to letter-size paper, and to increase the font size to keep the form 
legible. BLM issued a memorandum in 2007 directing BLM officials to accept the updated 
form. BLM, Form 3100-11, Offer to Lease and Lease for Oil and Gas, Instruction 
Memorandum 2008-049 (Dec. 27, 2007). This memorandum stated that BLM would 
change both the handbook and the regulation that established the standard for the form 
(43 C.F.R. § 3110.4(a)); however, BLM has not changed its handbook or the regulation.
handbook for competitive leasing, which directs BLM staff to offer parcels by conducting in-person auctions for competitive leases.\textsuperscript{19}  

- In 2016, BLM launched NFLSS, a publicly accessible, online system for submitting and processing nominations. Prior to NFLSS, nominations were submitted by mail or email and processed by individual BLM state offices using their own systems, which were not easily accessible to the public. However, BLM has not changed its handbooks to reflect the incorporation of NFLSS into the nomination process. Instead, BLM’s 1994 handbook for noncompetitive leasing directs BLM staff to use the Automated Land and Mineral Record System, a software system that BLM cancelled in 1998.\textsuperscript{20}

BLM’s Directives Manual, which provides policy for updating its guidance, states that BLM Assistant Directors—who manage BLM program areas, such as the agency’s oil and gas program—are responsible for updating the agency’s handbooks or manuals promptly when a policy change is made through a BLM instruction memorandum.\textsuperscript{21} However, the five BLM guidance documents for oil and gas leasing are out of date, and three of these five have not been updated for over 10 years, since BLM issued relevant instruction memorandums or other guidance. Table 1 lists these BLM guidance documents along with relevant instruction memorandums that have changed how BLM processes nominations and leases.


Table 1: BLM Oil and Gas Leasing Guidance Documents and Subsequent Instruction Memorandums That Have Changed the Oil and Gas Leasing Process

<table>
<thead>
<tr>
<th>Guidance documents</th>
<th>Instruction memorandums (IM) affecting guidance documents</th>
<th>Years since IM changed leasing processa</th>
</tr>
</thead>
</table>
BLM, Updating Oil and Gas Leasing Reform – Land Use Planning and Lease Parcel Reviews, IM No. 2018-034 (Jan. 31, 2018).  
BLM, Oil and Gas Leasing Reform – Land Use Planning and Lease Parcel Reviews, IM No. 2010-117 (May 17, 2010). | 11 |
IM No. 2018-034.  
IM No. 2010-117. | 11 |
IM No. 2018-034.  
BLM, Confidential Handling of Oil and Gas Informal Expressions of Interest, IM 2013-026 (Dec. 11, 2012). | 7 |
IM No. 2018-034.  
BLM, Oil and Gas Informal Expressions of Interest, IM No. 2014-004 (Oct. 28, 2013). | 7 |

Source: GAO analysis of Bureau of Land Management (BLM) documents. | GAO-22-103968

Note: We excluded one handbook—BLM, Manual Handbook 3100-1: Oil and Gas Adjudication Handbook: Oil and Gas Leasing, (Washington, D.C.: Sept. 6, 1985)—because it was published before the Federal Onshore Oil and Gas Leasing Reform Act of 1987, and it therefore was outside the scope of our review.

aTo determine whether a handbook or manual relevant to oil and gas leasing was outdated, we compared the IMs to the handbooks and manual that changed. The number of years since the IM changed the leasing process reflects the number of years after the first IM was issued relevant to each guidance document, through July 2021. We did not assess how much of the handbooks and manual were changed by the IMs.

Although BLM has revised its process, BLM’s outdated guidance documents led to inefficiencies by increasing the time staff need to explain the process, according to an industry stakeholder and BLM officials. For example, a representative from an association of oil and gas companies stated that BLM’s outdated guidance resulted in inefficiencies for some smaller oil and gas operators who do not have staff dedicated to navigating BLM’s processes. According to this representative, it would be useful if BLM guidance documents clearly described BLM’s process because currently these operators have to use their limited staff time to
search on BLM’s website for instruction memorandums or ask BLM staff to explain the process. BLM officials from one state office stated that because the guidance is outdated, their staff must spend additional time explaining the process step by step to help operators better understand the current process. The officials said that updated guidance could make this effort more efficient.

According to BLM officials, BLM has delayed updating its guidance because changing law has made it difficult for BLM to keep its guidance current. However, BLM issued instruction memorandums in recent years that have changed how BLM is to carry out its leasing, so it is unclear why BLM has not similarly updated its handbooks and manual. For example, BLM could update its handbooks and manual at the same time it issues relevant instruction memorandums. As a result of BLM’s current approach to updating guidance, the handbooks and the manual relevant to oil and gas leasing are outdated, although BLM’s Directives Manual calls for BLM to update them promptly.22 BLM officials told us that the agency is in the process of updating one of its outdated oil and gas leasing handbooks but that the agency does not plan to update the other handbooks and manual until it releases updated regulations.23 However, according to BLM’s schedule for updating these regulations, these updates will not be completed until at least the second half of calendar year 2022. Unless BLM conducts a review to determine why it has not been able to promptly update its five guidance documents as directed in its Directives Manual, and adjusts its approach for issuing updates accordingly, BLM may continue to have outdated guidance that contributes to inefficient use of staff time on the part of industry and BLM state offices. BLM state office staff in particular have experienced workload increases and strains in available resources because BLM shortened the timeline for processing nominations in 2018; as a result, these staff could benefit from the greater efficiency that updated guidance documents could provide.


23BLM officials told us that they were updating Handbook H-1790-1, National Environmental Policy Act; however, the officials did not provide a date when they planned to complete this update. BLM officials also told us that the agency planned to update Manual Handbook H-3100-1 by April 2022. We did not evaluate this handbook because it was published before the 1987 Reform Act and therefore outside the scope of our review.
BLM has not issued guidance that would help external NFLSS users better understand the status of parcels nominated for oil and gas leasing. As previously described, the public submits nominations for oil and gas leasing through NFLSS. BLM staff then use the system to prepare parcels for upcoming lease auction, such as by researching and evaluating their eligibility. Throughout BLM’s review process, BLM officials assign statuses to nominations in NFLSS, and the public can use the system to check on the status of their nomination.

Based on our analysis of NFLSS, we found the status of some nominations awaiting auction ambiguous because the status codes are not clearly defined and other external users—such as industry and the general public—may find the codes ambiguous as well. According to our review, there were 46 different nomination status codes in use in NFLSS as of June 2021, and it is unclear how some of these status codes relate to the stages of BLM’s nomination review process. For example, as of December 2020, BLM staff had entered a “submitted” status code for 151 nominations submitted by operators in 2020. Meanwhile BLM had entered a “pending” status for 2,433 nominations. However, when external users access the NFLSS system, the system does not have any guidance—such as a data dictionary—defining these codes. Therefore, based on our analysis of NFLSS, it is unclear how these codes differ.

In addition, an industry stakeholder stated that, according to its industry members, NFLSS does not contain enough detail on the status of nominated parcels, such as a parcel’s place in BLM’s review process. This industry stakeholder noted that having a greater understanding of BLM’s review process is important for industry’s short- and long-term planning for its oil and gas development, and uncertainty in BLM’s review process is a challenge for companies as they decide what land to nominate. For example, this industry stakeholder noted that BLM’s review of a nominated parcel can take 6 months to 5 or more years.

BLM’s Manual on Data Administration and Management provides that BLM put in place systems of controls to, among other things, reduce

---

24BLM officials told us that there are various reasons a nominated parcel would not be offered at auction, including if BLM is still in the process of reviewing the parcel, or if the parcel is located in a wilderness study area, wildlife refuge, or within an incorporated city. Parcels also may not be placed at lease auction if BLM is waiting for surface management agency consent or if ongoing litigation requires BLM to defer the parcel. For example, according to BLM, if a nomination includes lands where the surface is managed by another federal agency, BLM is required to obtain consent and recommendations from that agency before placing the lands at lease auction.
ambiguity and redundancy. BLM officials said that they have not developed written guidance for the status codes used in NFLSS due to competing priorities. Without guidance from BLM defining NFLSS’ status codes, external users may misinterpret the status for some nominations, creating ambiguity and limiting external users’ understanding of BLM’s review process.

Operators leased about 14 million of the 87 million acres nominated for oil and gas leasing from 2009 through 2019. Most of the leases acquired through competitive auctions—and especially leases that received high bonus bids—outperformed the leases acquired noncompetitively on various measures of performance, such as revenues generated during the primary term of the lease.25

Operators Leased a Small Portion of Acres Nominated, and Most Competitive Leases Far Outperformed Noncompetitive Leases

A total of about 87 million acres were nominated across BLM state offices for leasing from 2009 through 2019, and operators leased about 14 million acres over this time—a small portion of the acres nominated (see fig. 4).26 After receiving and processing the nominations for 87 million acres, using the review process described above, BLM offered about 18 million acres at lease auctions from 2009 through 2019. According to BLM documents and officials, there are various reasons a nominated parcel would not be offered at auction. For example, nominated parcels could be located in areas that are not eligible for leasing such as within a

---

25 The minimum bid for competitive leases at auction is $2 per acre, and winning bids at or above the minimum are called bonus bids.

26 This does not include acreage nominated through Bureau Motion, nor acreage nominated or leased in BLM’s Alaska state office. BLM data systems do not track a nominated parcel through to leasing outcomes, and parcels offered at competitive auction that are not leased competitively can be acquired noncompetitively on a first-come, first-served basis for a period of two years. Therefore, some acreage leased during this period may have been for acreage that was nominated or offered at auction prior to 2009. Conversely, some acreage nominated or offered at auction may still be leased in the future. In addition, while one leased acre covers a unique acre of land, BLM may receive multiple nominations for the same physical acre of land. We could not distinguish between duplicate or overlapping nominations and other reasons why nominations were not offered at auction because BLM did not begin consistently tracking this information until 2018.
wilderness study area, an incorporated city, or in an area without federal mineral rights. BLM may also need to defer the parcel due to ongoing litigation or while it secures surface management agency consent.27 Furthermore, there may be more than one nomination for parcels that cover the same land, resulting in duplicate nominations. BLM has not consistently tracked duplicate nominations or other reasons why nominated acreage has not been offered at auction, so we did not account for this in our analysis.28

Figure 4: Acreage Nominated, Offered for Lease, and Leased for Federal Onshore Oil and Gas Development, 2009 through 2019

Nominated: 87 million acres

Not offered at auction: 69 million acres

Offered at auction: 18 million acres

Not leased: 4 million acres

Leased: 14 million acres

Source: GAO analysis of Bureau of Land Management (BLM) data | GAO-22-103968

Note: Acreage totals do not include acreage nominated through Bureau Motion or nominations or leased acreage in BLM’s Alaska state office. BLM data systems do not track a nominated parcel through to leasing outcomes, and parcels offered at competitive auction that are not leased competitively can be acquired noncompetitively on a first-come, first-served basis for a period of two years. Therefore, some acreage leased during this period may have been for acreage that was nominated or offered at auction prior to 2009. Conversely, some acreage nominated or offered at auction may still be leased in the future. In addition, while one leased acre covers a unique acre of land, BLM may receive multiple nominations for the same physical acre of land. We could not distinguish between duplicate or overlapping nominations and other reasons why nominations were not offered at auction because BLM did not begin consistently tracking this information until 2018.

27According to BLM, if a nomination includes lands where the surface is managed by another federal agency, BLM is required to obtain consent and recommendations from that agency before offering the lands at a lease auction.

28Prior to NFLSS, each BLM state office managed this process independently and the reasons why a nominated acre were not offered at auction were not consistently tracked. BLM began consistently tracking this information through NFLSS in 2018.
The amount of acreage that is nominated and subsequently offered at a competitive lease auction varies by BLM state office. For example, about two-thirds of the total acreage nominated from 2009 through 2019 was in BLM’s Nevada state office (about 60.7 million of 86.8 million acres), as shown in table 2. Almost half of Nevada’s nominated acreage came from a single nomination for about 28 million acres in 2014. According to BLM officials in Nevada, this nomination constituted the majority of Nevada’s nominations for that year. Wyoming and Utah had the second and third largest amount of nominated acreage with about 8 million acres nominated in each state office during this 11-year period. With respect to acreage offered at competitive lease auction, BLM’s Nevada state office offered at auction about 7 million acres, or 12 percent of acreage nominated from 2009 through 2019. Among other BLM state offices, the acreage offered at lease auction as a percentage of the acreage nominated generally varied from 22 percent to 63 percent.

Table 2: Information on Nominated Acreage for Onshore Oil and Gas Leasing Received by BLM State Offices and Offered at Competitive Lease Auction, 2009 through 2019

<table>
<thead>
<tr>
<th>BLM state office</th>
<th>Nominated acreage received by BLM</th>
<th>Acreage offered at competitive auction</th>
<th>Estimated acreage offered at competitive lease auction as percent of acreage nominated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevada</td>
<td>60,703,313</td>
<td>7,018,752</td>
<td>12%</td>
</tr>
<tr>
<td>Wyoming</td>
<td>8,760,729</td>
<td>5,490,877</td>
<td>63</td>
</tr>
<tr>
<td>Utah</td>
<td>8,142,590</td>
<td>1,764,122</td>
<td>22</td>
</tr>
<tr>
<td>Colorado</td>
<td>2,523,360</td>
<td>777,613</td>
<td>31</td>
</tr>
<tr>
<td>Montana/Dakotas</td>
<td>2,483,730</td>
<td>1,348,871</td>
<td>54</td>
</tr>
<tr>
<td>New Mexico</td>
<td>2,180,663</td>
<td>826,150</td>
<td>38</td>
</tr>
<tr>
<td>All other BLM state officesa</td>
<td>2,054,520</td>
<td>889,418</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>86,848,904</td>
<td>18,115,801</td>
<td>21</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Bureau of Land Management (BLM) data. | GAO-22-103968

Note: Numbers may not add to total because of rounding. Table does not include acreage nominated through Bureau Motions. In addition, while one leased acre covers a unique acre of land, BLM may receive multiple nominations for the same physical acre of land. We could not distinguish between duplicate or overlapping nominations and other reasons why nominations were not offered at auction because BLM did not begin consistently tracking this information until 2018.

*aThe remaining BLM state offices are Eastern States, Arizona, California, Oregon, and Idaho. This does not include data from BLM’s Alaska state office because Alaska conducts leasing under different regulations from all other BLM state offices.

Furthermore, the amount of acres offered at a competitive auction and ultimately leased also varied by BLM state office. Although BLM’s Nevada state office had the largest amount of acreage placed on a competitive auction (about 7 million acres), it had the lowest percent of those acres that were leased (about 51 percent) from 2009 through 2019, as shown in
In contrast, BLM’s Wyoming state office had the second highest total amount of acres placed on a competitive auction (about 5.5 million), and all of those acres were leased during this time. The type of leased acreage also varied; the BLM Nevada state office had more acres leased noncompetitively than competitively during this time period in contrast to Wyoming, Utah, Colorado, Montana, and New Mexico.

### Table 3: Leasing Outcomes of Onshore Oil and Gas Leasing Acreage Offered at Competitive Lease Auction by BLM State Offices, 2009 through 2019

<table>
<thead>
<tr>
<th>BLM state office</th>
<th>Acreage offered at competitive lease auction</th>
<th>Acreage leased competitively</th>
<th>Acreage leased noncompetitively</th>
<th>Total acreage leased</th>
<th>Estimated total acreage leased as percentage of acreage offered at auction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevada</td>
<td>7,018,752</td>
<td>1,393,061</td>
<td>2,177,956</td>
<td>3,571,017</td>
<td>51%</td>
</tr>
<tr>
<td>Wyoming</td>
<td>5,490,877</td>
<td>5,258,863</td>
<td>364,783</td>
<td>5,623,646</td>
<td>100b</td>
</tr>
<tr>
<td>Utah</td>
<td>1,764,122</td>
<td>1,168,914</td>
<td>201,629</td>
<td>1,370,543</td>
<td>78</td>
</tr>
<tr>
<td>Colorado</td>
<td>777,613</td>
<td>595,465</td>
<td>79,988</td>
<td>675,453</td>
<td>87</td>
</tr>
<tr>
<td>Montana/Dakotas</td>
<td>1,348,871</td>
<td>843,543</td>
<td>272,950</td>
<td>1,116,493</td>
<td>83</td>
</tr>
<tr>
<td>New Mexico</td>
<td>826,150</td>
<td>751,271</td>
<td>16,889</td>
<td>768,160</td>
<td>93</td>
</tr>
<tr>
<td>All other BLM state officesa</td>
<td>889,418</td>
<td>773,236</td>
<td>39,568</td>
<td>812,804</td>
<td>91</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18,115,801</strong></td>
<td><strong>10,784,353</strong></td>
<td><strong>3,153,763</strong></td>
<td><strong>13,938,116</strong></td>
<td><strong>77</strong></td>
</tr>
</tbody>
</table>

Source: GAO analysis of Bureau of Land Management (BLM) data. | GAO-22-103968

Note: Numbers may not add to totals because of rounding. BLM data systems do not track a nominated parcel through to leasing outcomes, and parcels offered at competitive auction that are not leased competitively can be acquired noncompetitively on a first-come, first-served basis for a period of two years. Therefore, some acreage leased during this period may have been for acreage that was nominated or offered at auction prior to 2009. Conversely, some nominated acreage may still be leased in the future.

*aThe remaining BLM state offices are Eastern States, Arizona, California, Oregon, and Idaho. This does not include data from BLM’s Alaska state office because Alaska conducts leasing under different regulations from all other BLM state offices.

bLeased acreage reported during this time period exceeded the acreage offered at competitive auction.

### Most Competitive Leases Outperformed Noncompetitive Leases

Most competitive leases, in particular those that received high bonus bids, outperformed noncompetitive leases on various measures of performance such as revenues generated for the federal government, production, and how likely they are to be terminated. For example, according to our analysis, competitive leases with high bonus bids—those with bonus bids greater than $100 per acre—had higher revenues during their 10-year primary term than other competitive and noncompetitive leases that
started in fiscal years 2003 through 2009.\textsuperscript{29} Bonus bid amounts provide a market signal for a bidder’s expectation about a lease’s prospects for development at the time of sale, and we found that competitive leases with high bonus bids accounted for about $2.7 billion (about 78 percent) of the $3.4 billion in total primary-term revenue for these leases.\textsuperscript{30} Furthermore, we found that average primary-term revenues per acre for competitive leases with high bonus bids were about $1,042 per acre compared to less than $104 per acre for all other types of leases (see fig. 5).\textsuperscript{31} In addition, our analysis of leases that started in fiscal years 2003 through 2009 showed the amount of the bonus bid was positively associated with greater average royalty revenue per acre during the leases’ 10-year primary term. (Appendix II provides additional information on the performance of leases.)

\textsuperscript{29}We analyzed lease revenues generated for the federal government—bonus bids, rents, and royalties—for leases that started in fiscal years 2003 through 2009. These data are average revenue collected within the 10-year primary term for these leases and do not include other revenues, such as fees that operators paid to BLM. In addition to noncompetitive leases, our analysis considered four groups of competitive leases based on the bonus bid received per acre: the $2 per acre minimum bonus bid; greater than $2 through $20; greater than $20 through $100; or greater than $100. For more information, see appendix I. The association between bonus bids and royalty revenues also motivated our analysis comparing revenue outcomes between noncompetitive leases and competitive leases at the minimum bid. We analyzed revenues across the primary term and the decade after the primary term and found noncompetitive leases and competitive leases at the minimum $2 per acre bid performed more similarly than leases that received higher bonus bids. For more information on these analyses, see appendix I and appendix II.

\textsuperscript{30}In general, we assumed winning bonus bids represent a lower bound for bidders’ willingness to pay for a lease. There are many factors that may influence lease performance, such as differences in geology, commodity prices, technological changes, and changes in other economic circumstances at the time of auction or during the lease term. We addressed some of these factors indirectly by using bonus bid amounts as a proxy for a bidder’s expectations about a lease’s prospects for development. Empirical economic literature suggests a correlation between the numbers of bidders on a lease during auction, bonus bid amounts, and the subsequent value of production from leases across various leasing contexts. For more information, see appendix I.

\textsuperscript{31}We also found that higher bonus bid leases continue to outperform other lease types in the decade after their primary term. We analyzed revenue collected for years 11 to 20 from all noncompetitive and competitive leases that started in fiscal years 1993 to 1999 and found that competitive leases with high bonus bids accounted for the majority of revenues during these years. For more information on this analysis, see appendix II. We analyzed revenue on a per acre basis since competitive leases are smaller (756 acres on average) than noncompetitive leases (1,238 acres on average). Lease size limitations are set by the Mineral Leasing Act of 1920, as amended, and BLM regulations.
Competitive leases with high bonus bids produced more oil and gas and terminated less frequently than leases with other bid amounts. We analyzed leases that started in fiscal years 1987 through 2009. About 23 percent of competitive leases with high bonus bids produced oil and gas in their primary term. In comparison, less than 8 percent of all other types of competitive and noncompetitive leases we reviewed produced oil and gas in their primary term.
Furthermore, competitive leases with high bonus bids were less frequently terminated before the end of their primary term compared with all other noncompetitive and competitive leases we analyzed. According to BLM officials, a lease termination occurs when the operator does not pay its annual rental fees when due. Specifically, about 14 percent of competitive leases that received bonus bids greater than $100 per acre were terminated before the end of their primary lease term compared to a range of about 23 percent to 62 percent for all other lease types (see fig. 6).

Figure 6: Cumulative Percentage of Federal Oil and Gas Leases Terminated during Their 10-Year Primary Term for Competitive Leases with Various Bonus Bids and Noncompetitive Leases that Started in Fiscal Years 1987 through 2009

Percentage of leases terminated

70
60
50
40
30
20
10
0

Fiscal year after lease started

Noncompetitive leases
Competitive leases:
$2 per acre minimum bid
Greater than $2 through $20 bid
Greater than $20 through $100 bid
Greater than $100 bid

Source: GAO analysis of Bureau of Land Management (BLM) data. | GAO-22-103968

Note: We analyzed lease terminations—which occur when the operator does not pay its annual rental fees when due—during the 10-year primary term for oil and gas leases acquired through competitive auctions and leases acquired noncompetitively under the processes established in the Federal Onshore Oil and Gas Leasing Reform Act of 1987. The minimum bid for competitive leases at auction is $2 per acre, and winning bids at or above the minimum are called bonus bids. We adjusted cumulative terminations for each bonus bid group by year from the start of the lease through the end of the 10-year primary term. We adjusted bonus bids to fiscal year 2019 dollars using a gross domestic product price index for the purpose of assigning leases to bonus bid categories, though we did not adjust $2 per acre bids because the minimum bid has not changed since 1987.
### BLM Has Not Recently Reviewed Its Application Fees in Response to Changing Conditions

BLM’s oil and gas leasing process has changed and offices have faced some challenges since BLM established its current application fees in 2005. However, BLM has not recently reviewed its application fees. Further, BLM has not examined whether to institute a fee for nominating parcels for lease in light of changing conditions.

### BLM’s Leasing Process Has Experienced Some Changes and Challenges since 2005

BLM’s oil and gas leasing process, and conditions surrounding it, have changed since BLM established its current application fees in 2005. Specifically, the leasing process itself has changed. As previously discussed, BLM made three notable changes that may affect BLM’s costs for its leasing process. First, BLM was authorized to use online auctions in fiscal year 2015, and no longer expends resources on holding auctions because the winning bidders pay the auction company directly for auction expenses. \(^{32}\) Previously, a portion of the application fee was intended to recover BLM’s costs for holding in-person auctions. \(^{33}\) Second, BLM launched NFLSS to help improve the efficiency of receiving, managing, and tracking lease nominations. BLM officials stated that NFLSS also was developed to help shorten the time required to prepare for an upcoming lease auction. Third, BLM shortened the timeline for processing nominations to 6 months in 2018. \(^{34}\)

These changes in the leasing process have created challenges for BLM, as aspects of BLM’s leasing program have contributed to an increase in the workload of staff or a strain in available resources, according to BLM state officials. For example, BLM state officials said the reduced timeline has placed additional pressure on BLM’s state office staff to complete

---

\(^{32}\)BLM officials told us they have a “no-cost” contract with an online auction provider, EnergyNet, to hold BLM’s online lease auctions. In lieu of BLM paying EnergyNet to hold the auctions, winning bidders pay an additional 1.5 percent of their bonus bid to EnergyNet. In fiscal year 2019, operators paid a total of about $1.074 billion in bonus bids (excluding Alaska), implying about $16.1 million was paid to EnergyNet for holding the auctions during this time period. For context, BLM collected about $362,000 in oil and gas application fees in fiscal year 2019, excluding Alaska.

\(^{33}\)When it held in-person auctions, BLM incurred costs such as hiring auctioneers and renting space.

\(^{34}\)Prior to the 2018 change, BLM state offices’ timeline for processing nominations ranged, according to several BLM state officials, from 9 to 18 months.
many of the same duties in a shorter time span and has been a major challenge that has strained current resources.35

In addition, the nominations themselves can affect workloads and strain resources. Many of the BLM state officials we spoke with said that it is fairly common to receive nominations that have either inadequate or incomplete documentation, that are larger than the maximum parcel size, or that include ineligible lands. BLM officials said that nominations vary widely in their quality and size, and that the processing time for a single nomination can range from less than an hour to over a week, depending on the completeness of the information provided. For example, when nominations are larger than the maximum size allowed, or include ineligible lands, BLM state officials told us they have to reconfigure the lands into allowable parcels and verify the land descriptions to ensure that they are both eligible and available for leasing.

These challenges are particularly acute when BLM’s investments in processing nominations do not lead to issued leases. This was highlighted in BLM’s Nevada state office in 2014, when 28 million acres were nominated. BLM’s Nevada state officials said that it took the state and field office staff over 5 years to review and process the 28 million nominated acres, most of which ultimately did not result in a lease. More broadly, as discussed earlier, the large majority of the 87 million acres nominated from 2009 through 2019 did not result in a lease. See table 4. In accordance with its guidance, BLM reviews all nominations submitted and processes those that are eligible. As such, BLM incurs costs for processing all nominated acres, but does not recover all of these costs through its application fees, which are only charged when a lease is issued.

<table>
<thead>
<tr>
<th>BLM state office</th>
<th>Nominated acreage</th>
<th>Acreage leased</th>
<th>Acreage not leased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevada</td>
<td>60,703,313</td>
<td>3,571,017</td>
<td>57,132,296</td>
</tr>
<tr>
<td>Wyoming</td>
<td>8,760,729</td>
<td>5,623,646</td>
<td>3,137,083</td>
</tr>
</tbody>
</table>

35In 2021, BLM changed its approach to time frames, issuing policy that offices will extend review time frames, as necessary, to ensure there is adequate time to conduct comprehensive parcel reviews. As of our review, it was unclear to what extent this change in policy will affect pressures faced by field and state offices. See BLM, Oil and Gas Leasing—Land Use Planning and Lease Parcel Reviews, Instruction Memorandum (IM) No. 2021-027 (Apr. 30, 2021).
<table>
<thead>
<tr>
<th>BLM state office</th>
<th>Nominated acreage</th>
<th>Acreage leased</th>
<th>Acreage not leased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utah</td>
<td>8,142,590</td>
<td>1,370,543</td>
<td>6,772,047</td>
</tr>
<tr>
<td>Colorado</td>
<td>2,523,360</td>
<td>675,453</td>
<td>1,847,907</td>
</tr>
<tr>
<td>Montana/Dakotas</td>
<td>2,483,730</td>
<td>1,116,493</td>
<td>1,367,237</td>
</tr>
<tr>
<td>New Mexico</td>
<td>2,180,663</td>
<td>768,160</td>
<td>1,412,503</td>
</tr>
<tr>
<td>All other BLM state offices⁸</td>
<td>2,054,520</td>
<td>812,804</td>
<td>1,241,716</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>86,848,904</td>
<td>13,938,116</td>
<td>72,910,789</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Bureau of Land Management (BLM) data. | GAO-22-103968

Note: Numbers may not add to totals because of rounding. Table does not include acreage nominated through Bureau Motion. BLM data systems do not track a nominated parcel through to leasing outcomes, and parcels offered at competitive auction that are not leased competitively can be acquired noncompetitively on a first-come, first-served basis for a period of two years. Therefore, some acreage leased during this period may have been for acreage that was nominated or offered at auction prior to 2009. Conversely, some acreage nominated or offered at auction may still be leased in the future. In addition, while one leased acre covers a unique acre of land, BLM may receive multiple nominations for the same physical acre of land. We could not distinguish between duplicate or overlapping nominations and other reasons for why nominations are not offered at auction because BLM did not begin consistently tracking this information until 2019.

⁸The remaining BLM state offices are Eastern States, Arizona, California, Oregon, and Idaho. This table does not include data from BLM’s Alaska state office because Alaska conducts leasing under different regulations from all other BLM state offices.

BLM Has Not Recently Reviewed Existing Leasing Fees and Has Not Determined If These Fees Cover Intended Costs

BLM has not fully reviewed its application fees for oil and gas leasing in more than a decade. BLM last analyzed the costs BLM intended to recover with its application fees in 2005. That analysis was based largely on data initially collected in 1990 from BLM’s state offices on the costs for certain activities relevant to processing competitive and noncompetitive leases. BLM updated and re-analyzed the data in 1995, 1996, and 1999, before BLM finalized its application fees in 2005.³⁶

Since 2005, BLM has adjusted its application fees annually for inflation and has biennially reviewed the application fees.³⁷ However, BLM’s

³⁶In its rulemaking, BLM stated that BLM decided to use a weighted average rather than a simple average to determine a BLM-wide processing cost for each type of document. According to BLM, this method gave greater weight to the processing cost data from State Offices having a heavy workload, and thus more expertise, in processing a particular type of document. BLM, “Oil and Gas Leasing; Geothermal Resources Leasing; Coal Management; Management of Solid Minerals Other Than Coal; Mineral Materials Disposal; and Mining Claims Under the General Mining Laws—Final Rule,” 70 Fed. Reg. 58854, 58860 (Oct. 7, 2005) and “Supplemental notice of proposed rule,” 70 Fed. Reg. 41532, 41534 (July 19, 2005).

³⁷Specifically, BLM reviews these fees as part of a broader review of fees in the Energy and Minerals sector, which is made up of the following programs: Renewable Energy, Oil and Gas, Mining and Minerals, Coal, and Helium.
approach to conducting these reviews provides limited information for decision-makers because it does not assess all of the costs the application fees were intended to recover. Therefore, BLM’s biennial review cannot be used to determine whether these application fees cover intended costs. BLM’s costs that are not covered by collected fees are paid through annual appropriations.

OMB Circular A-25 and the CFO Act call for federal agencies to conduct a biennial review of the costs associated with providing a good, resource, or service to ensure that existing fees are adjusted to reflect changes in costs. In particular, Circular A-25 directs agencies to assess if user fees are sufficient to recover the full cost to the federal government, to the extent permitted by law. BLM does not have assurance that its current application fees appropriately reflect changes in conditions because its biennial fee review does not examine all the costs BLM intended to recover through its application fees. Without revising the biennial review approach to include an analysis of all the costs BLM intended to recover, and adjusting fees accordingly, BLM could be collecting too much or too little relative to its costs. If BLM finds it has been collecting too little in fees, adjusting fees to cover all costs could reduce the need for annual appropriations to pay for such costs. BLM’s total expenditures in fiscal year 2019 to process nominations and leases amounted to $4.9 million. Should BLM decide to increase its fees as a result of this analysis, it could recover more of its costs than the $362,000 in oil and gas application fees it collected in fiscal year 2019, excluding Alaska.

BLM Has Chosen Not to Charge a Fee for Nominations but Has Not Fully Examined Whether It Should Do So

BLM has chosen not to charge a lease nomination fee but has not fully examined whether to impose such a fee. OMB Circular A-25 and GAO’s User Fee Design Guide highlight the importance of conducting regular reviews to determine if new fees should be initiated for programs and the benefits of doing so. Specifically, Circular A-25 directs federal agencies to conduct regular reviews of programs to determine whether fees should

38BLM’s approach in its biennial review is to compare collected fees to the portion of relevant costs that BLM assigned to its fees; relevant costs that are paid through annual appropriations are not included, according to BLM officials. Since BLM’s biennial review omits certain costs, it cannot provide decision makers with complete assurance that the agency’s fees as are in line with current costs.


be initiated for government services or goods for which fees are not currently charged. GAO’s *User Fee Design Guide* points out that by requiring beneficiaries to pay for the costs of services, the government can constrain demand as well as prevent the inefficient use of government services.

BLM initially decided not to charge a fee for nominations in 2005. BLM officials told us they revisited this decision in 2014, but provided no documentation of the extent of this review. Without fully examining whether to charge a fee for nominations, BLM risks continuing to incur costs to process many nominations that do not result in leases. Without such an examination, BLM cannot be assured that it is balancing encouraging nominations with controlling costs. If BLM decided to charge a fee for nominations, it could reduce the need for annual appropriations to pay for the costs of processing nominations that do not result in leases.

Several BLM state officials we interviewed said that a nomination fee would be one possible solution for reducing the number of nominations that ultimately go unleased. According to BLM state officials, such a fee would make nominators more likely to submit nominations for only those lands that they are truly interested in leasing. BLM state officials commented that such a fee would also help reduce processing costs that are not currently being recovered and help manage their existing resources by, for example, focusing their efforts on those nominations that are more likely to result in a lease.

These processing costs can be significant. For example, BLM incurs costs involving National Environmental Policy Act of 1969 (NEPA) related environmental reviews. These reviews must be completed prior to a lease auction for all eligible nominated lands, whether the lands are ultimately leased or not. Based on recent data, the costs to prepare environmental assessments for state offices’ lease auctions—conducted

---

41The National Environmental Policy Act of 1969 (NEPA), as amended, requires federal agencies, including BLM, to prepare an environmental impact statement (EIS)—a detailed statement of the likely environmental effects of the action and a consideration of alternatives to the proposed action—when the agency proposes a major federal action significantly affecting the quality of the human environment. Agencies may also prepare an environmental assessment (EA)—a more concise analysis—to determine whether the action is likely to significantly affect the environment. Based on the results of the EA, the agency may then move to prepare an EIS or conclude its analysis in a Finding of No Significant Impact, if appropriate. In some circumstances, agencies may have other options to satisfy NEPA requirements.
to meet NEPA requirements—ranged from $17,000 to $178,000 collectively per lease auction. According to BLM officials, the cost for the NEPA-related reviews are recoverable but BLM chose not to recover them through its existing fees. Additionally, BLM officials said that a nomination fee could make more funding available so that BLM state offices could hire more staff and provide more training, among other things.

Imposing a nomination fee would also be in line with other BLM energy programs that have a fee for nominations. For example, BLM’s geothermal leasing program charges a flat fee of $125 for geothermal nominations and $0.12 per nominated acre. BLM also charges a $5 per acre nomination fee for its solar and wind energy programs. Officials from the Texas state oil and gas program told us that they charge fees for nominations to discourage frivolous nominations.

However, several BLM officials expressed concerns about instituting a nomination fee. They said a fee may reduce the number of nominations submitted, which may lead to fewer land being leased. However, BLM could design a nomination fee to help mitigate this potential effect on leasing. For example, BLM could design a nomination fee that is deductible from later payments like the application fee or first year’s rents, thus not creating any additional fees for nominators if the land is ultimately leased. Alternatively, the fee could be refundable so that nominators are not adversely affected if their nomination is leased by another party.

BLM has taken actions in recent years to modernize and improve the efficiency of its oil and gas leasing process. For example, in fiscal year 2015, BLM was authorized to hold online lease auctions and, in 2016, the agency launched its NFLSS online system for operators to submit nominations and for BLM officials to process and prepare nominations for lease sales. In addition, Interior is currently undertaking a comprehensive

Conclusions

42An Interior memorandum, issued in April 2020, directed all departmental bureaus and offices to begin collecting information on the costs of NEPA-related reviews to improve the public’s understanding of the total costs associated with preparing, reviewing, and issuing these reviews and any associated analyses that would be made public upon publication of each review. Additional Interior guidance clarified that under this memo, NEPA documents that involve costs less than $10,000 are not required to be reported. These data include 12 environmental reviews, conducted from June 2020 through and January 2021. BLM Utah state officials specifically informed us that the combined cost for conducting NEPA-related reviews in order to conduct its last two lease auctions was about $200,000, with an average cost of about $2,100 for each parcel.
However, BLM has not always ensured that its guidance and fees have kept pace with changing conditions. Specifically, though BLM policy requires prompt updates to key documents when new policies and instructions are issued, we found that BLM's handbooks and manual related to the leasing process were not current despite policy changes in recent years. Unless BLM understands why it has difficulty updating its handbooks and manual, and adjusts its approach accordingly, BLM may continue to have outdated guidance into the future that results in inefficiencies within industry and BLM. Similarly, BLM has not defined the status codes used in NFLSS, which are therefore unclear to users. Without updating its handbooks and manual, and developing guidance for the status codes used for nominations, BLM may continue to expend staff resources to explain its internal processes and procedures to external audiences, and NFLSS users may continue to have a limited understanding of BLM's review process.

Moreover, we found that BLM has not recently fully reviewed its existing application fees, or examined whether to institute a fee for nominations. OMB guidance directs BLM to biennially compare its costs with its fees, but BLM's biennial review examines just a portion of the costs that the application fees were intended to recover. Instead, BLM relies on outdated analysis of data that were collected three decades ago. Thus, BLM's biennial review does not provide assurance that its fees reflect actual relevant costs. Without revising its biennial review approach to examine all costs BLM intended to recover with its application fees, and adjusting fees accordingly, BLM could be collecting too much or too little relative to its costs. Similarly, without reexaming whether to charge a fee for nominations, BLM risks continuing to expend resources to process nominations that do not result in leases without assurance that it is striking the appropriate balance between encouraging nominations and controlling costs.

We are making the following four recommendations to BLM:

The Director of BLM should conduct a review to determine why the agency has had difficulty updating handbooks and its manual for oil and gas leasing as directed by BLM policy, and then adjust BLM’s approach to updating them accordingly. (Recommendation 1)
The Director of BLM should develop guidance regarding the status codes for nominations contained in NFLSS. (Recommendation 2)

The Director of BLM should revise the agency’s approach to conducting biennial fee reviews to ensure that future biennial reviews examine all costs BLM intended to recover with its application fees and, where appropriate, adjust fees accordingly. (Recommendation 3)

The Director of BLM should re-examine whether to charge a fee for nominating lands for oil and gas development. (Recommendation 4)

We provided a draft of this report to Interior for their review and comment. In its comments, reproduced in appendix III, Interior concurred with our recommendations and stated that it either has initiated or plans to initiate specific actions to address the concerns we identified about the oil and gas leasing process. Interior also provided technical comments, which we incorporated as appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from this report date. At that time, we will send copies of this report to the appropriate congressional committees, the Secretary of the Interior, and other interested parties. In addition, the report will be available at no charge on the GAO website at https://www.gao.gov.

If you or your staff have any questions about this report, please contact me at 202-512-3841 or ruscof@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

Frank Rusco
Director, Natural Resources and Environment
Appendix I: Objectives, Scope, and Methodology

You asked us to review oil and gas leasing on federal lands. This report examines: (1) changes to the Bureau of Land Management’s (BLM) policies for oil and gas leasing since 1987, (2) leasing outcomes, and the performance of competitive and noncompetitive leases, and (3) the extent to which BLM has reviewed fees for oil and gas leasing in response to changing conditions.

To describe the changes to BLM’s policies for oil and gas leasing since 1987, we reviewed BLM regulations, handbooks, and other documents that we identified as relevant to oil and gas leasing. We used this information to describe the steps in BLM’s leasing process, and any changes to this process since 1987, when Congress passed the Federal Onshore Oil and Gas Leasing Reform Act of 1987. We did not analyze BLM documents that were published before 1987. We compared BLM’s guidance documents to BLM’s Directives Manual, which provides policy for updating its guidance. We did not assess whether BLM staff appropriately distinguish which parts of its guidance documents (such as handbooks and manuals) to follow and which not to. We also reviewed BLM’s system for accepting and processing nominations for oil and gas leasing—the National Fluids Lease Sale System (NFLSS)—and associated documentation about the system. We analyzed NFLSS data on status codes, and we determined that the data were sufficiently reliable for the purposes of our reporting objectives. We compared BLM’s management of NFLSS to practices described in BLM’s Manual on Data Administration and Management.

To examine leasing outcomes and the performance of competitive and noncompetitive leases, we analyzed nomination and lease sales information from BLM’s Oil and Gas Statistics for federal onshore oil and gas leasing. Specifically, we used BLM data on nominated acreage and acreage offered at auction from BLM’s Oil and Gas Statistics from 2009 through 2019, and we calculated acreage not offered at auction by subtracting these. We obtained lease data from BLM’s database for mineral and land use—Legacy Rehost System 2000 (LR2000). We used LR2000 data on acreage leased competitively and noncompetitively from

---

¹For the purposes of this report, we use the term “nominations” to describe Expressions of Interest and Presale Noncompetitive Offers. Expressions of Interest are informal nominations and are the most frequent form of nominations BLM receives for oil and gas leasing. A presale noncompetitive offer is a formal nomination in which a nominator makes certain advance payments to acquire a lease noncompetitively if no bid is received at a competitive auction. Under BLM’s current regulations, BLM can also submit a Bureau Motion to identify lands for oil and gas leasing and nominate them for an upcoming lease sale, but according to BLM data, BLM has rarely used Bureau Motions.
Appendix I: Objectives, Scope, and Methodology

2009 through 2019 by BLM state office, and calculated acreage not leased by subtracting LR2000 leasing data from BLM’s data on acreage offered at auction from BLM’s Oil and Gas Statistics for these years. BLM data systems do not track a nominated parcel through to leasing outcomes, and parcels offered at competitive auction that are not leased competitively can be acquired noncompetitively on a first-come, first-served basis for a period of two years. Therefore, some leases issued during this period may have been for acreage that was nominated or offered at auction prior to 2009. Conversely, some acreage nominated or offered at auction may still be leased in the future. In addition, while one leased acre covers a unique acre of land, BLM may receive multiple nominations for the same physical acre of land. We could not distinguish between duplicate or overlapping nominations and other reasons for why nominations are not offered at auction because BLM did not begin consistently tracking this information until 2018.

To describe revenues from competitive and noncompetitive leases, we used LR2000 leasing data and revenue data from the Department of Interior’s Office of Natural Resources Revenue (ONRR) Minerals Revenue Management Support System (MRMSS). We identified and classified competitive and noncompetitive leases using LR2000 case types to group leases acquired through the 1987 Reform Act process; we standardized and combined revenue reported in two different ONRR data sets (ONRR-2014 and ONRR Direct Billed data); and we linked information on lease characteristics from LR2000 to MRMSS revenue data.

2ONRR is to collect revenues from oil and gas leases in accordance with the specific terms and conditions established in the leases, including revenues from rents and royalties. MRMSS contains information on revenue amounts, revenue types (e.g., royalties, rents, and bonus bids), commodities produced (e.g., oil and gas), and the date operators reported revenues and sold products that generated royalties.

3For more detailed information on these methodology steps, see: GAO, Oil and Gas: Onshore Competitive and Noncompetitive Lease Revenues, GAO-21-138 (Washington, D.C.: Nov. 19, 2020).
For the purpose of our report, we limited our scope to federal onshore oil and gas leases.\textsuperscript{4} We further restricted our analysis to competitive and noncompetitive leases\textsuperscript{5} that started in December 1986 through September 2019. Within this scope, we reviewed revenues for fiscal years 2003 through 2019.\textsuperscript{6} We also reviewed other measures of performance such as lease termination and lease production from fiscal years 1987 through 2019.

To describe the relationship between bonus bids and lease outcomes, we calculated bonus bid per acre by dividing each lease’s bonus bid revenue by its acreage.\textsuperscript{7} We also adjusted bonus bids to fiscal year 2019 dollars using a gross domestic product price index for the purpose of assigning leases to bonus bid categories, though we did not adjust $2 per acre bids because the minimum bid has not changed since 1987.\textsuperscript{8} We then grouped competitive leases into four categories based on leases that had bonus bids per acre that were equal to $2, greater than $2 through $20, greater than $20 through $200, and greater than $200.

\textsuperscript{4}We limited our analysis to revenues reported for fiscal years 2003 through 2019 because we determined that MRMSS data were reliable for that timeframe. We considered LR2000 leases with case type codes listed in BLM’s Desk Reference Guide to be federal onshore oil and gas leases. We identified ONRR revenues for federal onshore oil and gas leases based on information in MRMSS about mineral type (oil and gas leases), land class (federal), and land category (onshore). In addition, we restricted revenues to those obtained from oil, gas, and natural gas liquids. We also excluded leases in Alaska, since BLM does not record these leases in LR2000.

\textsuperscript{5}Our analysis included 72,750 competitive and 27,540 noncompetitive leases, and excluded 210,018 leases we defined as “other.” The majority (about 93 percent) of our “other” lease category included leases acquired through processes that pre-date the 1987 Reform Act. Our “other” lease category also included renewal and exchange leases; private leases acquired with federal land acquisition; and leases acquired through Special Acts such as rights of way, units of the National Parks System, General Service Administration surplus lands, and Naval oil shale reserves. Since we focused on leases acquired through the 1987 Reform Act process, our report defines competitive and noncompetitive leases more narrowly than BLM.

\textsuperscript{6}We assigned revenues to fiscal years based on the date the revenues were posted in MRMSS to be consistent with ONRR’s public reporting of revenue data. Our analysis includes revenues from October 1, 2002 through September 30, 2019.

\textsuperscript{7}We used LR2000 to identify bonus bid amounts for competitive leases during 1987 through 2019 based on the action remark field for action code 267, entered when BLM received a bid at auction. We were able to assign bonus bids for approximately 95 percent of competitive leases. To calculate bonus bid per acre, we rounded up acreage to the next highest integer to reflect BLM lease sale bidding rules for minimum bids and bid increments.

\textsuperscript{8}We used a fiscal year chain-weighted gross domestic product price index to adjust bonus bid amounts for inflation based on GAO analysis of U.S. Department of Commerce data.
greater than $20 through $100, and greater than $100.\textsuperscript{9} We compared total primary-term rents, royalties, and bonus bid amounts for each competitive lease bonus bid group and noncompetitive leases.

To compare how leases performed in terms of revenue, we analyzed leases that started during two time periods to compare revenues at different stages of a lease lifecycle. To compare early stages of a lease lifecycle, we restricted our sample to primary-term revenues for leases that started in fiscal years 2003 through 2009.\textsuperscript{10} Primary-term revenues collected in the first 10 years capture all types of lease revenue, including rents, bonus bids, and royalties.\textsuperscript{11} To compare revenues at a later stage of a lease lifecycle, we restricted our sample to revenues generated during the second decade of the lease lifecycle for leases that started in fiscal years 1993 through 1999. The comparison during the second decade adds insight into royalty revenues generated beyond the primary term, which account for a majority of all revenues from federal onshore oil and gas leasing.\textsuperscript{12} To adjust competitive and noncompetitive revenues based on the acreage of leases, we calculated the average revenue per acre by dividing total revenues for fiscal years 2003 through 2019 in

\textsuperscript{9}To create a bonus bid distribution, we rank-ordered competitive leases that started in fiscal years 2003 through 2009 by the bonus bid per acre amount and then broke them into four roughly even groups, or quartiles.

\textsuperscript{10}We defined the lease primary term as a 10-year period following a lease start date, calculated based on the lease effective (start) date from LR2000 and either the date products were sold (royalties) or the date revenues were recorded into MRMSS (rents and bonus bids).

\textsuperscript{11}Our analysis of primary term revenues captures the first 10 years of revenue data posted after the lease started. Since ONRR allows operators to revise reported revenues for a 6-year period, it is possible that the revenue we report may be updated for some leases starting in later years. However, for leases starting in fiscal year 2003, we are confident that our data capture all royalties based on products sold between fiscal years 2003 through 2013, since our data include any updated royalties posted though fiscal year 2019, which captures the full 6-year revision period following the lease primary term.

\textsuperscript{12}Royalties accounted for about 99 percent of the revenues reported in the decade after the primary term for leases that started from fiscal year 1993 through 1999. As a result, for our analysis of revenues in the decade after the primary term we only report royalty revenues.
MRMSS by the total acreage of leases in LR2000. Differences in the average revenue per acre among all competitive and noncompetitive leases do not suggest the difference in performance of leases since we do not account for factors affecting the revenues from a lease, such as differences in geology or when leases started. We adjusted all revenues to fiscal year 2019 dollars using a gross domestic product price index.

We also report on other measures of lease performance for leases that started in fiscal years 1987 through 2009. Specifically, we calculated metrics on the likelihood and timing of lease production and termination during each lease’s primary term. For each bonus bid per acre group, we calculated the percentage of leases that produced oil and gas during the primary term and the cumulative percentage of leases that were terminated during each year of a lease’s primary term. To visually illustrate the likelihood of lease termination over time, we graphed cumulative terminations for each bonus bid group by year from the start of the lease through the end of the primary term.

To address potential selection bias from lease sales, we compared the average revenue per acre for competitive leases acquired at the $2 per acre minimum bid to those of noncompetitive leases. Selection bias could arise if leases with higher expectations of generating revenues generally attract more bids than those with lower expectations of generating revenue. Competitive leases at the $2 minimum bid only received one

---

13MRMSS contained revenue data for fiscal years 2003 through 2019, so we were not able to report the full history of revenues for many older leases in BLM’s LR2000 that may have produced revenues in earlier years. We use average revenues per acre to compare revenues. Since noncompetitive leases typically have greater acreage than competitive leases, a comparison of revenues on a per-acre basis standardizes revenues relative to the area of land leased.

14We used LR2000 data from fiscal years 1987 through 2019 to identify actions for lease terminations (action code 244) or a memo of first production of oil and gas associated with a lease. To be a proxy for whether or not a lease generated federal royalty revenues, we included both actual production on a lease (action code 658) and production allocated from an agreement (action code 660). The primary term includes actions during the first 10 years.
bid, so we assumed their expectations of generating income were similar to noncompetitive leases that received no bids.\textsuperscript{15}

Our results should be interpreted in the context of some limitations. There are many factors that may influence lease performance, such as differences in geology, commodity prices, technological changes, and other changes in economic circumstances at the time of auction or during the primary term. We addressed some of these factors indirectly by using bonus bid amount as a proxy for bidder interest and the leases’ prospect for development.\textsuperscript{16} However, these measures are imperfect and our results are descriptive statistics that cannot provide statistical associations about the relationship of bonus bids and lease performance or comparisons of performance between groups of leases. We present our results in the context of limitations.

In addition, our analysis of leases that started in fiscal years 2003 through 2009 may not be representative of leases that started in other years. We interpret our results in light of this potential limitation and take steps to mitigate it. Specifically, we interpret performance of competitive and noncompetitive leases based on a range of performance measures, stages of a lease lifecycle, and samples of leases, in concert with other evidence. For example, we also analyzed leases that started in 1993 through 1999 and compare revenues at different stages of a lease lifecycle. As a second example, our analysis of lease termination and lease production draws from over 30 years of data and covers leases that started in fiscal years 1987 through 2009. Moreover, results from our

\textsuperscript{15}\textit{The defining distinction between competitive and noncompetitive leases is that competitive leases received at least one bid at a lease sale auction, while noncompetitive leases do not receive bids at or above the minimum bonus bid. Noncompetitive leases are only issued if no adequate bid is received at a competitive lease sale. Those competitive leases that received only one bid are at the minimum threshold of being considered competitive, so we considered them to be more comparable to noncompetitive leases than other competitive leases with more than one bidder. In addition, according to experts, a $2 per acre bonus bid is not a significantly higher investment than noncompetitive bids because other costs associated with leases, such as rents or development, represent significantly higher costs over the lifecycle of a lease. For example, a noncompetitive lease would accrue $17.50 per acre in rental costs over 10 years, and a roughly $10,000 fee is required to apply for a drilling permit.}

\textsuperscript{16}\textit{In general, we assumed winning bonus bids represent a lower bound for bidders’ willingness to pay for a lease.}
Appendix I: Objectives, Scope, and Methodology

analysis were consistent with auction theory and other research on oil and gas leasing.\(^{17}\)

We assessed the reliability of BLM data by (1) performing electronic testing, (2) reviewing existing information about the data and the systems that produced them, and (3) interviewing agency officials knowledgeable about the data. We determined that the data were sufficiently reliable for the purposes of our reporting objectives.

To evaluate the extent to which BLM has reviewed fees for oil and gas leasing in response to changing conditions, we analyzed laws, regulations, and documentation on how BLM established and has reviewed its fees for oil and gas leasing. In particular, we compared BLM’s actions to review its fees for oil and gas leasing to Office of Management and Budget (OMB) Circular No. A-25, and the Chief Financial Officers Act of 1990 (CFO Act).\(^{18}\) We also compared BLM’s actions to OMB Circular No. A-25 and GAO’s User Fee Design Guide to assess the extent to which BLM reviewed the need for a nomination fee. To provide context for how much of BLM’s leasing costs are recovered through application fees, we analyzed information on BLM’s costs and fee receipts from BLM’s financial management system. We determined that the data were sufficiently reliable for the purposes of our reporting objectives.

For all objectives, we interviewed officials from a non-generalizable sample of six BLM state offices (Colorado, Montana/Dakotas, New Mexico, Nevada, Utah, and Wyoming) selected based on the amount of acres nominated and leased in their areas of jurisdiction. Together, these six BLM state offices account for approximately 96 percent of acres nominated for oil and gas leasing from 2006 through 2018 and about 94 percent of all leased acreage issued from 2009 through 2019. We excluded BLM’s Alaska state office from the scope of this report because the BLM Alaska state office conducts leasing under different regulations from the other BLM state offices.\(^{19}\) We also interviewed BLM

\(^{17}\)Empirical economic literature suggests a correlation between the numbers of bidders on a lease during auction, bonus bid amounts, and the subsequent value of production from leases across various leasing contexts.


\(^{19}\)Lands in BLM Alaska’s National Petroleum Reserve and Coastal Plains are leased under regulations at 43 C.F.R. Part 3130.
headquarters officials, state oil and gas offices from Texas and New Mexico, and two stakeholder groups, one representing independent oil and gas producers and one that analyzes federal oil and gas policy, among other things. We selected the two stakeholders to reflect a diverse range of stakeholder viewpoints on BLM’s oil and gas leasing process.

We conducted this performance audit from December 2019 to November 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
Appendix II: Additional Information on the Performance of Competitive and Noncompetitive Leases

This appendix provides additional information on how onshore oil and gas leases managed by the Bureau of Land Management (BLM) performed in their primary term, and in the decade after their primary term.

Revenues from Leases during Primary Term

We compared average revenues during the primary term—the first 10 years of a lease—from noncompetitive leases and competitive leases issued at various bonus bids and that started in fiscal years 2003 through 2009. The amount of revenues from these two types of leases in their primary term differed by BLM state office in terms of the types of revenue—bonus bids, rents, and royalties. In general, we found that competitive leases that were acquired at the minimum bonus bid of $2 per acre generated more in royalties on average per acre than did noncompetitive leases because competitive leases were more likely to be productive. We also found that some state offices generated little or no royalty revenue from noncompetitive leases and competitive leases sold at the minimum bid that started in fiscal years 2003 through 2009. See table 5.

<table>
<thead>
<tr>
<th>BLM State Office</th>
<th>Noncompetitive Leases</th>
<th>Competitive Leases at Minimum Bid of $2 per acre</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rents</td>
<td>Royalties</td>
</tr>
<tr>
<td>Arizona</td>
<td>$4</td>
<td>$0</td>
</tr>
<tr>
<td>California</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Colorado</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Eastern States</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Idaho</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Montana/Dakotas</td>
<td>11</td>
<td>29</td>
</tr>
<tr>
<td>New Mexico</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Nevada</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Oregon</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Utah</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Wyoming</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Average</strong></td>
<td><strong>11</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

Source: GAO analysis of Bureau of Land Management (BLM) and Office of Natural Resources Revenue (ONRR) data. | GAO-22-103968

Note: Numbers may not add to totals because of rounding. Data reflect revenues reported to ONRR and not the amount collected by the federal government. We analyzed revenue generated in the 10-year primary term for leases that started in fiscal years 2003 through 2009. Our analysis does not include other revenues, including administrative fees that operators reported. Bonus bids are not collected for noncompetitive leases. We adjusted all revenues to fiscal year 2019 dollars using a gross domestic product price index. We also adjusted bonus bids for the purpose of assigning leases to bonus bid categories, though we did not adjust $2 per acre bids because the minimum bid has not changed since 1987.
Appendix II: Additional Information on the Performance of Competitive and Noncompetitive Leases

We also found that the average primary-term revenues from competitive leases with bonus bids greater than $2 per acre to $100 were about $69 per acre compared with about $1,042 per acre for competitive leases with bonus bids greater than $100 per acre. As shown in Table 6, in general we found that some state offices generated little or no royalty revenue from these leases that started in fiscal years 2003 through 2009.

Table 6: Average Primary-Term Revenues per Acre for Competitive Leases with Bonus Bids of $2 to $100 and Competitive Leases with Bonus Bids Greater than $100 for Leases that Started in Fiscal Years 2003 through 2009, by Type of Revenue and BLM State Office

<table>
<thead>
<tr>
<th>BLM State Office</th>
<th>Competitive Leases with Bonus Bids Greater than $2 to $100</th>
<th>Competitive Leases with Bonus Bids Greater than $100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>$11 Bonus Bids $8 Rents $0 Royalties $19 Total</td>
<td>$- Bonus Bids $- Rents $- Royalties $- Total</td>
</tr>
<tr>
<td>California</td>
<td>16 Bonus Bids 18 Rents 107 Royalties 140 Total</td>
<td>446 Bonus Bids 21 Rents 163 Royalties 629 Total</td>
</tr>
<tr>
<td>Colorado</td>
<td>32 Bonus Bids 17 Rents 25 Royalties 74 Total</td>
<td>510 Bonus Bids 14 Rents 91 Royalties 615 Total</td>
</tr>
<tr>
<td>Eastern States</td>
<td>23 Bonus Bids 15 Rents 4 Royalties 42 Total</td>
<td>523 Bonus Bids 14 Rents 115 Royalties 653 Total</td>
</tr>
<tr>
<td>Idaho</td>
<td>11 Bonus Bids 10 Rents 0 Royalties 21 Total</td>
<td>- Bonus Bids - Rents - Royalties - Total</td>
</tr>
<tr>
<td>Montana/Dakotas</td>
<td>24 Bonus Bids 15 Rents 245 Royalties 284 Total</td>
<td>795 Bonus Bids 16 Rents 2,098 Royalties 2,908 Total</td>
</tr>
<tr>
<td>New Mexico</td>
<td>30 Bonus Bids 17 Rents 26 Royalties 73 Total</td>
<td>790 Bonus Bids 17 Rents 1,000 Royalties 1,807 Total</td>
</tr>
<tr>
<td>Nevada</td>
<td>13 Bonus Bids 10 Rents 0 Royalties 24 Total</td>
<td>193 Bonus Bids 20 Rents 0 Royalties 214 Total</td>
</tr>
<tr>
<td>Oregon</td>
<td>33 Bonus Bids 9 Rents 0 Royalties 43 Total</td>
<td>164 Bonus Bids 7 Rents 0 Royalties 171 Total</td>
</tr>
<tr>
<td>Utah</td>
<td>23 Bonus Bids 11 Rents 7 Royalties 42 Total</td>
<td>394 Bonus Bids 14 Rents 121 Royalties 529 Total</td>
</tr>
<tr>
<td>Wyoming</td>
<td>31 Bonus Bids 17 Rents 9 Royalties 57 Total</td>
<td>325 Bonus Bids 17 Rents 109 Royalties 450 Total</td>
</tr>
<tr>
<td>Total Average</td>
<td>27 Bonus Bids 15 Rents 27 Royalties 69 Total</td>
<td>525 Bonus Bids 16 Rents 502 Royalties 1,042 Total</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Bureau of Land Management (BLM) and Office of Natural Resources Revenue (ONRR) data. | GAO-21-103968

Note: Numbers may not add to totals because of rounding. Data reflect revenues reported to ONRR and not the amount collected by the federal government. We analyzed revenues generated in the 10-year primary lease term for leases that started in fiscal years 2003 through 2009. Our analysis does not include other revenues, including administrative fees that operators reported. We adjusted all revenues to fiscal year 2019 dollars using a gross domestic product price index. We also adjusted bonus bids for the purpose of assigning leases to bonus bid categories.

Revenues from Competitive and Noncompetitive Leases after Primary Term

In general, many leases continue to produce royalties after their 10-year primary term, and therefore we conducted additional analysis on lease performance in the decade after their primary term. We found that the results from the previous analysis described for leases started in fiscal years 2003 through 2009 generally remains consistent when reviewing royalty revenues from leases started in fiscal years 1993 through 1999, in
particular that competitive leases with high bonus bids accounted for the majority of revenues. Specifically, for competitive leases with bonus bids greater than $100 that started in fiscal years 1993 through 1999, the average lease royalty revenue per acre in the decade after their primary term was about $1,200 per acre compared with average lease royalty revenue below $400 per acre for all other types of competitive and noncompetitive leases (see fig. 7).

Figure 7: Average Royalties per Acre from the Decade after Primary Term for Federal Oil and Gas Leases that Started in Fiscal Years 1993 through 1999, by Lease Type and Bonus Bid Amount

Our additional analysis on lease performance in the decade after primary terms also generally remains consistent with the finding that noncompetitive leases and competitive leases at the minimum $2 per acre bid performed more similarly than leases that received higher bonus
bids. Specifically, we found that average per acre royalty revenue in the decade after their primary term for leases that started in fiscal years 1993 through 1999 was about $87 per acre for noncompetitive leases compared to $49 per acre for competitive leases at the minimum bonus bid of $2 per acre.
Appendix III: Comments from the Department of the Interior

United States Department of the Interior
OFFICE OF THE SECRETARY
Washington, DC 20240

Frank Rusco
Director, Natural Resources and Environment
U.S. Government Accountability Office
441 G Street, NW Washington, DC 20548

Dear Mr. Rusco:

Thank you for providing the Department of the Interior (Department) an opportunity to review and comment on the Government Accountability Office (GAO) draft report titled “Oil and Gas Leasing: BLM Should Update its Guidance and Review its Fees” (GAO-22-103968). We appreciate the GAO’s review and feedback related to the Bureau of Land Management’s (BLM) oil and gas leases on Federal land.

The GAO report contains four recommendations to the BLM. Below is a summary of actions taken or planned to implement the recommendations.

Recommendation 1: The Director of BLM should conduct a review to determine why it has had difficulty updating handbooks and manual for oil and gas leasing as directed by BLM policy, and then adjust BLM’s approach to updating them accordingly.

Response: Concur. The BLM reviewed its previous draft routings for oil and gas leasing policy and identified that the agency delayed action due to litigation, pending court action, or pending rulemaking on leasing regulations. The BLM will review its leasing manuals and handbooks to determine if it may move forward with smaller, focused updates even if it may require more frequent revisions.

Responsible Official: Chief, Division of Business, Engineering, and Evaluations

Recommendation 2: The Director of BLM should develop guidance regarding the status codes for nominations contained in NFLSS.

Response: Concur. The BLM will develop a guidance document which defines the nomination status codes. Status codes are still being added to National Fluids Leasing Sale System (NFLSS) as further development occurs.

Responsible Official: Chief, Division of Business, Engineering, and Evaluations

Recommendation 3: The Director of BLM should revise its approach to conducting biennial fee reviews to ensure that future biennial reviews examine all costs BLM intended to recover with its application fees, and, where appropriate, adjust fees accordingly.

Responsible Official: Chief, Division of Business, Engineering, and Evaluations
Response: Concur. The Department plans to initiate new regulations and revise existing rules. The proposed rule (Regulatory Information Number 1004-AE80) would revise the BLM’s fossil fuel regulations to update the leasing fees (e.g., competitive lease application, non-competitive lease application, leasing under right-of-way).

Responsible Official: Chief, Division of Business, Engineering, and Evaluations

Recommendation 4: The Director of BLM should re-examine whether to charge a fee for nominations.

Response: Concur. The Department plans to initiate new regulations and revise existing rules. Charging a fee for an expression of interest is being considered in the proposed rule (Regulatory Information Number 1004-AE80) that would revise the BLM’s fossil fuel regulations.

Responsible Official: Chief, Division of Business, Engineering, and Evaluations

In the attached enclosure, we provided technical comments on the draft report. We hope these comments will assist you in preparing the final report. If you have any questions, please contact, Amy Hay, Chief, Division of Business, Engineering, and Evaluations, at 303-236-8392, or LaVanna Stevenson, Audit Liaison Officer, at 202-912-7077.

Sincerely,

Laura Daniel-Davis
Principal Deputy Assistant Secretary
Land and Minerals Management

Enclosure
### Appendix IV: GAO Contact and Staff

#### Acknowledgments

In addition to the contact named above, Quindi Franco (Assistant Director), John Johnson (Analyst in Charge), Marie Bancroft, Lee Carroll, Breanne Cave, Maggie Childs, John Delicath, Samuel Facas, William Gerard, Christine Kehr, Gwen Kirby, Serena Lo, Joe Maher, Susan Murphy, Laurel Plume, Dan Royer, Jerry Sandau, Dawn Simpson, and Carolyn Voltz made key contributions to this report.

<table>
<thead>
<tr>
<th>GAO Contact</th>
<th>Frank Rusco, (202) 512-3841 or <a href="mailto:ruscof@gao.gov">ruscof@gao.gov</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>In addition to the contact named above, Quindi Franco (Assistant Director), John Johnson (Analyst in Charge), Marie Bancroft, Lee Carroll, Breanne Cave, Maggie Childs, John Delicath, Samuel Facas, William Gerard, Christine Kehr, Gwen Kirby, Serena Lo, Joe Maher, Susan Murphy, Laurel Plume, Dan Royer, Jerry Sandau, Dawn Simpson, and Carolyn Voltz made key contributions to this report.</td>
</tr>
</tbody>
</table>
## GAO’s Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO’s commitment to good government is reflected in its core values of accountability, integrity, and reliability.

## Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. You can also subscribe to GAO’s email updates to receive notification of newly posted products.

## Order by Phone

The price of each GAO publication reflects GAO’s actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO’s website, https://www.gao.gov/ordering.htm.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

## Connect with GAO

Connect with GAO on Facebook, Flickr, Twitter, and YouTube. Subscribe to our RSS Feeds or Email Updates. Listen to our Podcasts. Visit GAO on the web at https://www.gao.gov.

## To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:
Website: https://www.gao.gov/about/what-gao-does/fraudnet
Automated answering system: (800) 424-5454 or (202) 512-7700

## Congressional Relations

A. Nicole Clowers, Managing Director, ClowersA@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

## Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548

## Strategic Planning and External Liaison

Stephen J. Sanford, Managing Director, spel@gao.gov, (202) 512-4707 U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548

Please Print on Recycled Paper.