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Support for Offshore Oil and Gas Drilling among the California Public

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Support for Offshore Oil and Gas Drilling among the California Public¹

This report describes Californians' opinions about offshore oil and gas development. The report begins by describing the trends in support for offshore drilling since 1977. It then focuses on explaining the surge of support for offshore oil drilling that accompanied the rapid increase in gasoline prices in 2000 and 2001.

In this report, we present data from a series of public opinion polls of Californians, which were conducted between 1977 and 2001. The surveys were conducted by the Field Institute, a nonpartisan, not-for-profit public opinion research organization established by the Field Research Corporation.² The samples were representative cross-sections of California adults with sample sizes ranging from 485 to 1,034 (See the data appendix for details).

We should also note that this study updates some of the information published in a previous MMS report, *Trends in Public Opinion on Offshore Oil Development in California* (Smith 1995), and in the recently published book, *Energy, the Environment, and Public Opinion* (Smith 2002).³

Trends in Support for Offshore Oil Drilling

The earliest Field Poll question about offshore oil drilling was asked in 1977. Respondents were asked to agree or disagree with the statement,

“Oil companies should be allowed to drill more oil and gas wells in state tidelands along the California seacoast.”

That question was asked ten more times through 2001. Three possible answers were recorded—agree, disagree, and undecided. The percentage of undecided respondents varied from four to eight percent over the eleven surveys. The percentages of respondents favoring more oil and gas drilling are shown in Figure 1.

At the end of the 1970s, support for offshore oil drilling grew in California, peaking at 57 percent in 1980. This support was driven by the OPEC oil embargoes and the energy crisis of 1979/1980. After 1980, however, public support for offshore oil development along the California coast declined substantially. The decline in support for oil development from 1980 to 1998 was not smooth. Figure 1 shows a sharp drop in support for oil development between 1984 and 1989, and a bounce upward between 1989 and 1990. The overall trend of declining support in the 1980s seems to be the result of gradually declining oil prices, but the sharp drop in support in 1989 is no doubt the result of the *Exxon Valdez* oil spill in Alaska in March, 1989—shortly before the 1989 survey was conducted. The Field Poll asked its 1989 question in July, when newspapers were still covering the oil spill clean-up efforts and various legal actions against Exxon. Consequently, the level of support for further coastal oil development that we see in 1989 differs from what it would have been had people not been thinking about the recent oil-related disaster. By 1990, the *Exxon Valdez* presumably no longer jumped to mind when people were asked about offshore oil drilling, so the polls registered an increase in

support for drilling over 1989. However, we should note that the 1990 level of support is lower than the 1984 level. From a long-term perspective, the post-1980 decline in support for oil drilling can be seen to continue in both the 1990 and 1998 observations.

The last survey, conducted in May 2001, shows a sharp increase in support for offshore oil and gas development. Support rose from the historic low point of 20 percent in 1998 to 45 percent in 2001. More precisely, 45 percent favored more development; 46 percent opposed more development; and 8 percent were undecided.⁴ The likely cause of the increase, of course, is the rapid increase in gasoline prices that began in 2000.

To explore the effects of the price of gasoline on support for offshore drilling, figure 2 adds the real price of gasoline to the public opinion data.⁵⁶ Here we see a fairly reasonable fit between the two trends. When the price of gasoline rose in the late 1970s, so did support for offshore oil drilling. When the price of gasoline fell in the 1980s, support for offshore oil fell as well. The 1989 survey shows a sharp drop in pro-development feelings that is not matched by gasoline prices, but it does correspond to the *Exxon Valdez* oil spill. The post-1998 rise in support again parallels the rise in gasoline prices.

The public opinion data are not even spaced across time, so regression analysis and other more sophisticated multivariate statistical methods are not appropriate here. However, an analysis of some national survey data on offshore oil drilling (reported in Smith 2002, chapter 3) shows that changes in the price of gasoline and in the consumer price index (which are highly correlated) both do an excellent job predicting public support for oil development in time-series regression models.

We can sum up the trend data by saying that we do not see a public that is strongly pro-environmental or anti-oil drilling. Instead, we see a public that responds to changes in the price of gasoline. When gasoline prices were low or falling, public support for oil development fell; when gasoline prices were rising, public support for more drilling rose. The public was rationally responding to real world events.

Figure 1. Support for Offshore Oil Drilling among Californians



Figure 2. Support for Oil Drilling and the Price of Gasoline.



Who Changed Their Minds?

In order to learn more about what caused the 25 percent increase in support for offshore oil drilling between 1998 and 2001, we will compare the results of those two surveys. Although we cannot track individual change in opinion over that time period, we can examine how the patterns of support and opposition to oil development changed. The changes in those patterns will reveal what sorts of people changed most, and tell us something about what caused the changes.

Broadly speaking two sets of factors seem to explain the changing pattern of attitudes toward offshore oil drilling—self-interest and political orientations. We will begin with an examination of the role of self-interest.

The Self-Interest Explanation

The key indicator of self-interest is family income. People with the lowest incomes are most likely to be affected by the increase in gasoline prices because the increase represents a larger share of their household's disposable income. Upper-income people may not like paying more to drive their cars, but the increase certainly does not pose any kind of personal inconvenience.

Figure 3 presents the patterns of support for increased offshore oil development by income in 1998 and 2001. The upper, solid line represents the percentage of support for oil drilling in 2001; the lower, dashed line represents the percentage of support in 1998. In 1998, there is clearly no relationship. About 20 percent of the respondents at every income level favored more drilling. In 2001, however, two things changed. First, the overall level of support for drilling increased among all income groups. Second, the level of support for drilling increased most sharply among those earning less than \$20,000 per year. In that lowest income group, support increased by 38 percent, while in the other income groups, support increased 18 to 24 percent. The group being hit hardest by the gasoline price hikes responded with a surge of support for increased offshore oil drilling.

The influence of income can perhaps also be seen the patterns of support for oil drilling by age. Normally, age is the most reliable predictor of pro-environmental sentiments (Jones and Dunlap 1992). The young lean in a pro-environmental direction (in this case, against oil and gas development), while the old lean toward pro-development stands. In figure 4, however, we see a reversal of the usual relationship. In 1998, the young were less supportive of oil drilling than the old. Whereas only 20 percent of those thirty and younger favored more drilling, 24 percent of those over sixty favored more drilling. The relationship is not very strong, but it does fit the typical pattern of the young being more pro-environmental. In 2001, however, the relationship reverses. The young are the most supportive of more oil drilling, with 48 percent in favor. The old are the least supportive at 42 percent. Again, the relationship is not very strong, but that hides the fact that support grew 18 percent among the old, but 28 percent among the young.

Figure 3. Support for Oil Drilling by Income, 1998 and 2001.

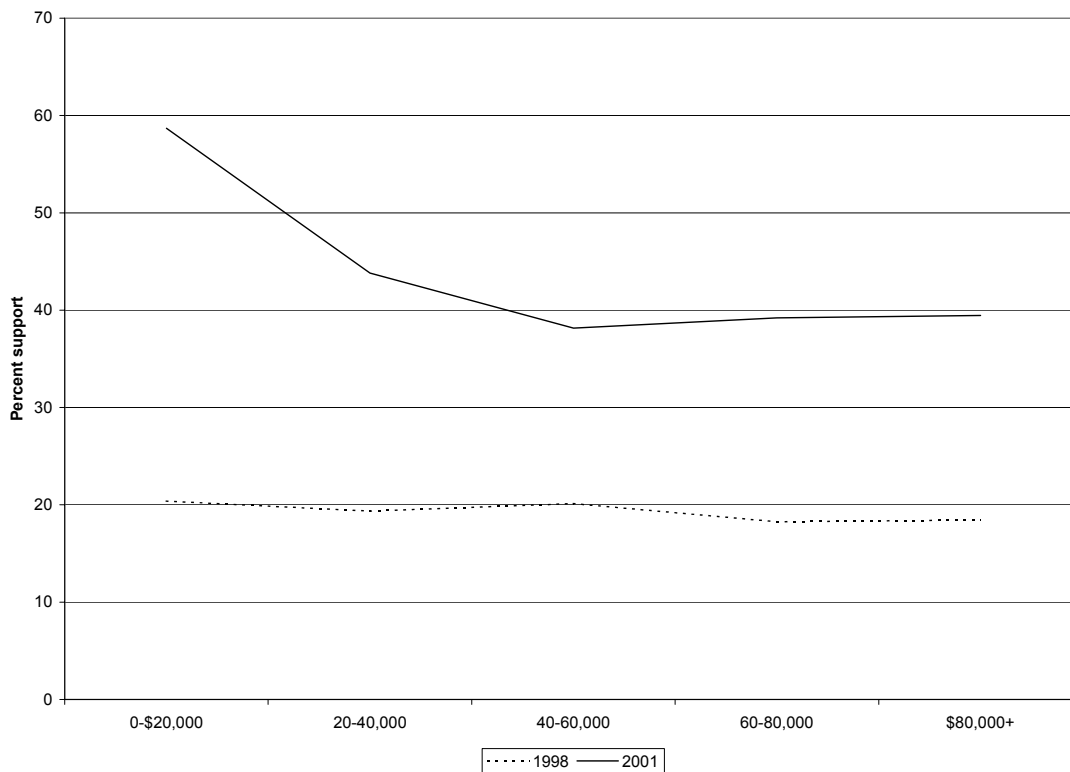
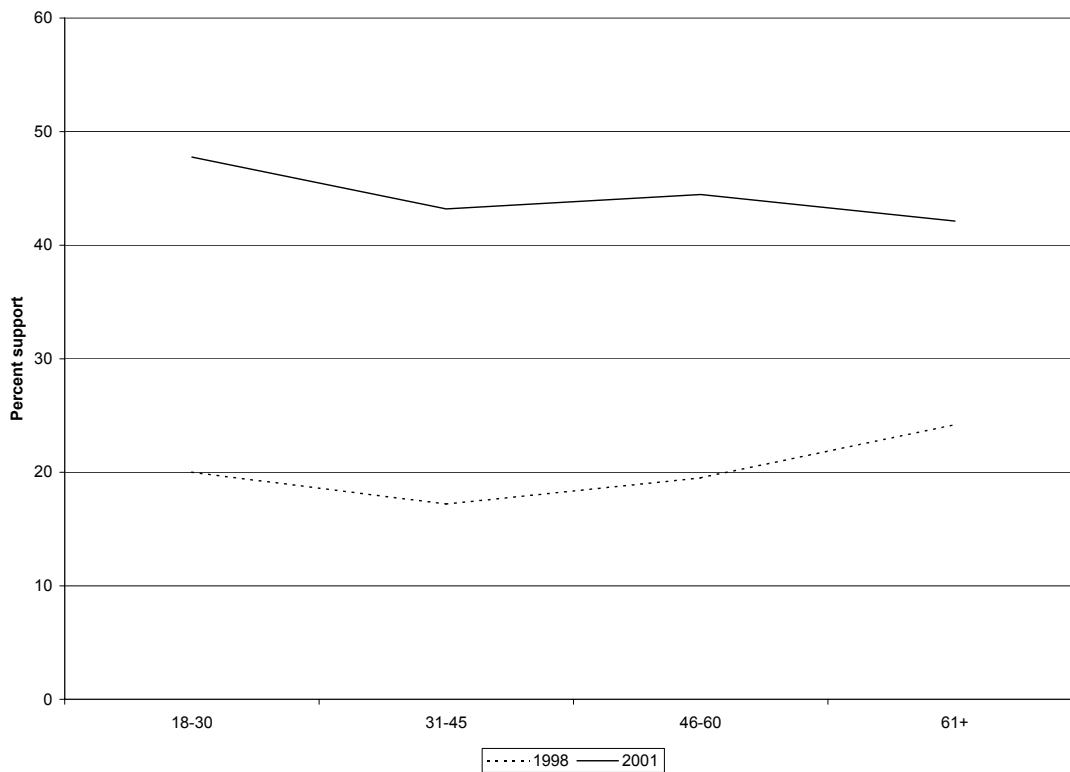


Figure 4. Support for Oil Drilling by Age, 1998 and 2001.



Why did the young move more strongly in a pro-drilling direction than older respondents? One part of the answer is probably that the young have lower incomes than older respondents. Among the youngest group in the 2001 survey, 27 percent fall in the lowest income category, and an additional 32 percent fall in the next higher category. Although those in the 61+ age group have incomes almost as low as the young, they drive far less. In the 1998 survey, 62 percent of the young drive to work, but only 12 percent of the oldest group do. In short, the rise in gasoline prices hit the youngest Californians the hardest, which seems likely to account for the jump in support for oil drilling among the young.

The influence of self-interest and income can also be seen in the changing patterns of support for oil drilling among different racial and ethnic groups. As figure 5 shows, whites—the group with the highest average incomes—changed the least between 1998 and 2001. In 1998, only 19 percent of Whites favored more drilling. Their support doubled to 38 percent three years later. In contrast, support for oil drilling grew by 27 percent among Blacks, 32 percent among Latinos, and 35 percent among Asians. Again, the lower income groups moved more strongly in favor of more oil drilling.

Because we have two surveys that asked questions of two different groups of respondents in two years, we cannot be absolutely certain about the causes of change. Nevertheless, the data on income, age, race, and ethnicity strongly suggest that two major causes of change in people's attitudes toward offshore oil drilling were self-interest and income. Low-income groups, who were hit hardest by the gasoline price hikes of 2000 and 2001, moved most strongly in favor of more offshore oil drilling. Middle- and upper-income groups also shifted toward a more favorable view of offshore oil drilling, but it would seem that because their incomes shelter them from the impact of higher prices, they shifted far less than lower-income groups.

The Political Orientations Explanation

The role of political orientations—such as party identification and ideology—is a bit more complicated than the role of self-interest. The argument about political orientations is that when they come into play depends on whether political issues receive media attention, and on whether the issues are controversial. When the news media ignore issues, and when politicians from opposite parties agree, partisan and ideological differences in the public tend to be small. In contrast, when the news media focus on issues and politicians jump in on opposite sides, partisan and ideological differences in the public tend to be large.

The partisan and ideological differences in the public stem both from two causes. First, people respond to political leadership. When Democratic leaders take one side in a dispute and Republican leaders take the opposite side, they are teaching—or leading—their respective followers in opposite directions. Of course, when political leaders ignore issues, or when they agree about them, Democrats and Republicans in the general public tend toward similar views. Second, people tend to bring their opinions on specific issues into line with their basic political values and predispositions *when they think about issues*.

Figure 5. Support for Oil Drilling by Race/Ethnicity, 1998 and 2001.

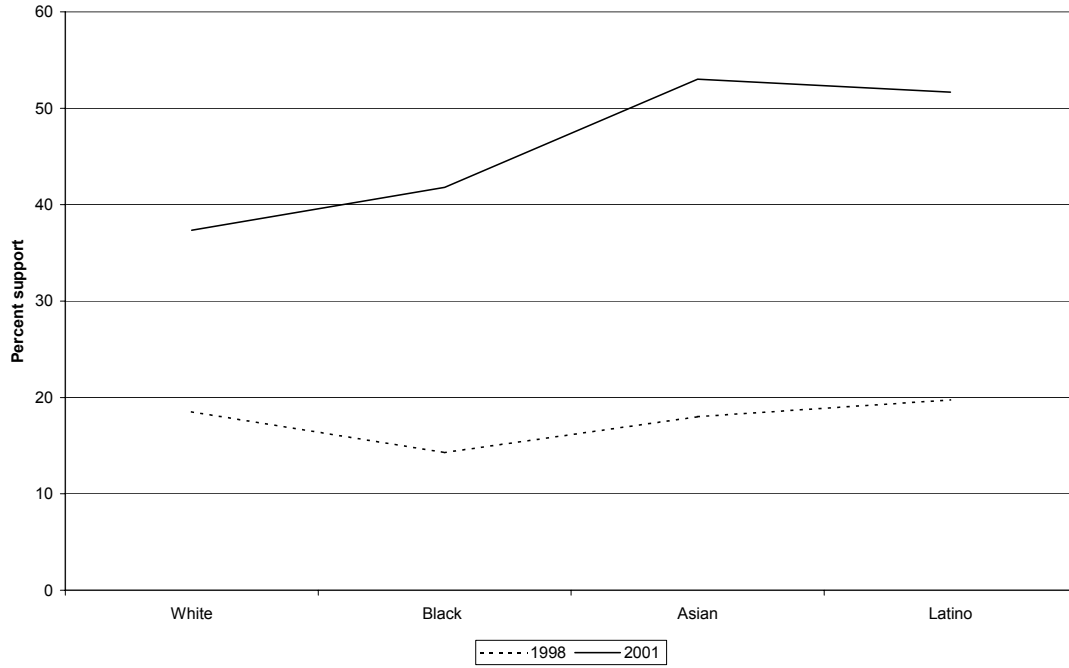
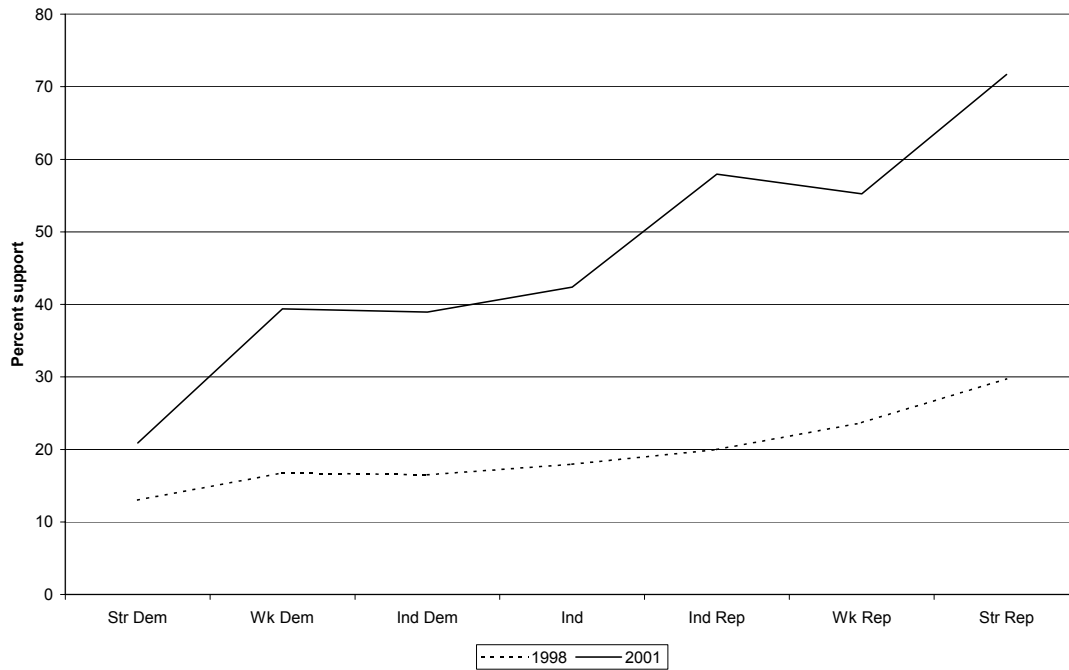


Figure 6. Support for Oil Drilling by Party Identification, 1998 and 2001.



Democrats and liberals tend to be egalitarian, and tend to lean toward pro-environmental stands when they begin thinking about issues. Republicans and conservatives, in contrast, share more individualist values, which lead them toward more pro-development positions. When issues do not receive much attention from the news media, people largely ignore the issues and, as a result, people's basic political values often do not match their opinions on specific issues. However, when issues do receive extensive media coverage, people think about the issues and, as a consequence, they tend to bring their opinions on specific issues into line with their overall political philosophies. (See Smith 2002 for a more detailed presentation of this argument.)

In our case, offshore oil development did not receive much media attention, and was not controversial in 1998. Gasoline prices (adjusted for inflation) hit a historic low point in 1998, with an average price of only \$1.03 per gallon in the United States. Energy crises seemed to be events of the distant past. Neither Washington political leaders nor major oil companies were pushing to increase oil drilling off the coast of California. Democratic and Republican leaders in California joined one another in opposing offshore oil drilling. Under these circumstances, political orientations should not make much difference. In 2001, however, the situation had changed dramatically. Gasoline prices had shot up. Public opinion polls showed that the high price of gasoline was the most important issue to most Americans throughout the campaign year 2000 (Pew Research Center for the People & Press, 2000), and politicians began to disagree sharply along partisan lines about oil development. Most prominently, during the 2000 presidential campaign, Governor George Bush called for opening up the Arctic National Wildlife Refuge in Alaska to oil drilling, while Vice President Al Gore denounced that proposal (Bruni 2000; Mitchell 2000). As a result of these events, we should expect to see much sharper partisan and ideological differences in 2001 than in 1998.

Two measures of political orientations are available in our 1998 and 2001 surveys—party identification and ideological self-labels. Figure 6 presents the data on party identification. The lower, dashed line shows the various levels of support for more oil drilling across the political spectrum in 1998. A partisan difference clearly existed, but it was not very large. Whereas 13 percent of the strong Democrats supported more oil and gas drilling, 30 percent of the strong Republicans supported it. In 2001, however, the differences were far sharper. Among strong Democrats, support for more oil drilling had grown to 21 percent, but among strong Republicans, it had grown to 72 percent—a 42 percent increase.

The picture is largely the same with ideology, shown in figure 7. In 1998, 12 percent of the strong liberals favored more oil drilling, while 30 percent of the strong conservatives favored it. Three years later, support for drilling among strong liberals had grown to 19 percent, while support among strong conservatives had shot up to 61 percent. What had been a low-key issue with modest partisan and ideological differences in 1998 became a high-profile, highly partisan and ideological issue in 2001.

Figure 8 presents the party identification and ideology data in a slightly different format. Instead of showing the levels of support for offshore oil drilling, figure 8 shows the

Figure 7. Support for Oil Drilling by Ideology, 1998 and 2001.

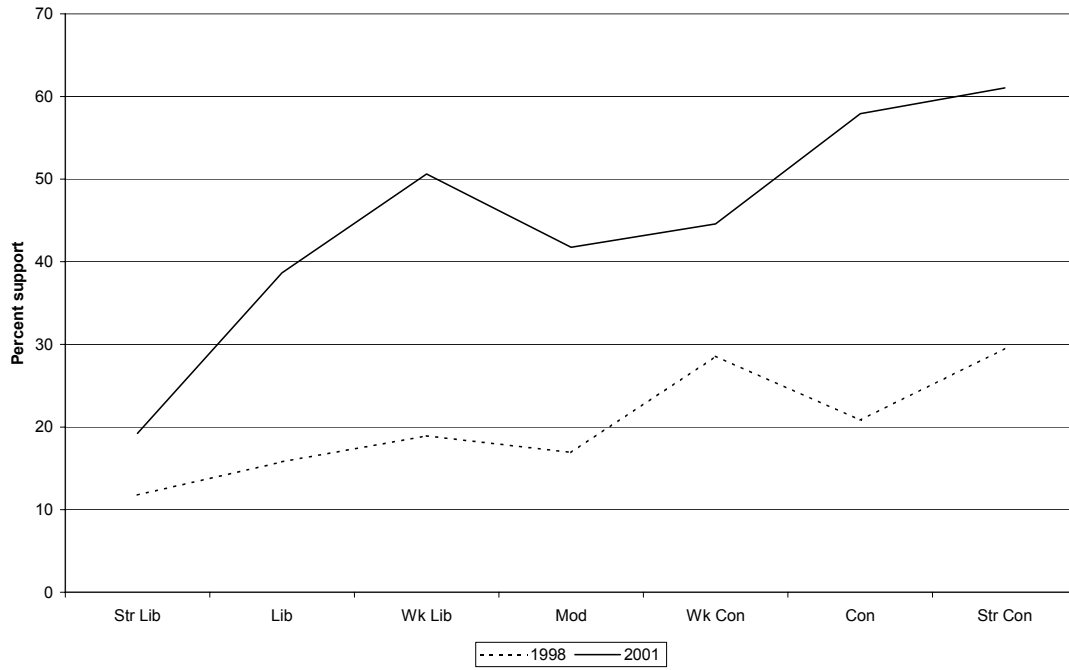
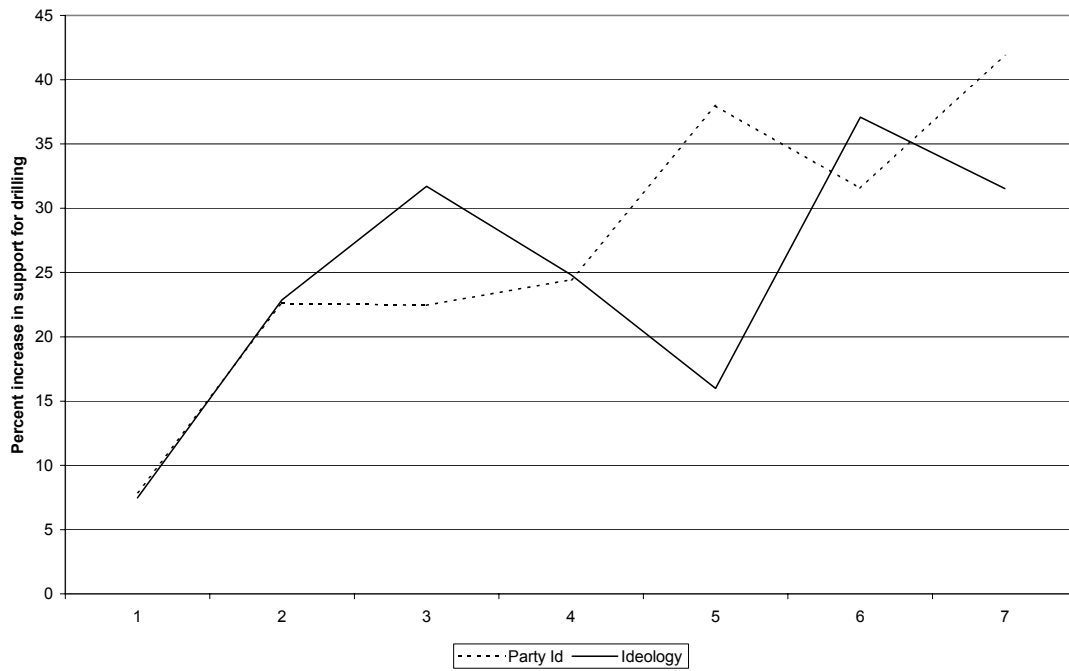


Figure 8. Growth in Support for Oil & Gas from 1998 to 2001



difference in levels of support between 1998 and 2001. Because both party identification and ideology are measured on 7-point scales, we can graph both relationships on a single chart. Point 1 represents strong Democrats and strong liberals; point 7 represents strong Republicans and strong conservatives. Here we see that the least amount of change—a mere 7 percent—occurred among strong liberals and Democrats at the left end of the figure. The largest change occurred at the opposite end of the political spectrum, among Republicans and conservatives. The effect of political leadership and media attention was a surge of support for more oil and gas development by Republicans and conservatives.

Conclusions

The data presented in this report allow us to draw several useful conclusions. First, the public responds rationally to events in the world. The public's views on offshore oil development are not fixed. They change when relevant conditions—such as the price of gasoline—change. In the most recent survey available, 45 percent of the California public supported more drilling along the coast of California, 46 percent opposed it, and 8 percent were undecided. That level of support represents a sharp increase over the level of support three years earlier, and it was doubtless due in large part to the corresponding increase in the price of gasoline.

Second, self-interest seems to be an important cause of the public's attitudes toward oil and gas development. The lowest income group in our survey, people earning less than \$20,000 per year, moved most sharply in favor of more oil development. These, of course, are the people who would be hurt the most by higher gasoline prices. Similar shifts in favor of more oil and gas development can be seen in other low-income groups.

Third, political orientations seem to be another important cause of the public's attitudes toward oil and gas development. Republicans and conservatives increased their support for oil and gas far more than did Democrats and liberals. Previous research suggests that this happened because of two reasons. Republican and conservative leaders called for more oil development, while Democratic and liberal leaders opposed it. And Republican and conservative values are more predisposed to pro-development, free-market arguments than Democratic or liberal values.

Based on these considerations, we can conclude that future support for oil and gas development—both in California and elsewhere—will depend on the price of gasoline and on political leadership.

Data Appendix

Data from the surveys listed below were used in this report. All of these data are publicly available from the University of California, Berkeley's UCDATA.

Survey	Dates	Sample Size
7703	6/17-7/2/77	1,034
7801	1/7-15/1978	1,003
7902	5/3-15/1979	485 (random half; total sample n=979)
8002	4/2-8/1980	501 (random half; total sample n=1,012)
8006	10/15-18/1980	506 (random half; total sample n=1,018)
8104	10/26-11/1/1981	1,102
8401	2/1-9/1984	743 (random half; total sample n=1,511)
8903	7/12-23/1989	993
9004	8/17-27/1990	614 (random half; total sample n=1,235)
COODEPS*	3/5-18/1998	810
0102	5/11-20/2001	448 (random half; total sample n=1,015)

*California Offshore Oil Drilling and Energy Policy Survey

Survey Questions used in this Analysis

Income: “Now, we don't want to know your exact income, but just roughly, could you tell me if your annual household income before taxes is under \$20,000, \$20,000 to \$40,000, \$40,000 to \$60,000, \$60,000 to \$80,000, or more than \$80,000?”

Age: “What is your age?”

Party identification: “Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent or what?”

If Republican or Democrat: “Would you call yourself a strong or not very strong (Republican) (Democrat)?”

If independent: “Do you consider yourself as closer to the Republican or the Democratic Party?”

Ideology: “Generally speaking, in politics do you consider yourself as conservative, liberal, middle-of-the-road?”

If conservative: “Do you consider yourself a strong or not very strong conservative?”

If liberal: “Do you consider yourself a strong or not very strong liberal?”

If middle-of-the-road: “If you had to choose, would you consider yourself as being conservative, liberal, or middle-of-the-road?”

Ethnicity: “Are you a Latino or of Hispanic origin, such as Mexican-American, Latin American, South American, or Spanish-American?”

Race: “For classification purposes, we'd like to know what your racial background is. Are you White, Black or African-American, Asian, or are you a member of another race?”

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Endnotes

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- ² The Field Institute is located at 550 Kearny Street, Suite 900, San Francisco, California 94108. Data from all the Field Polls used in this report are archived at the University of California's UC DATA, located at the U.C. Berkeley campus. Neither of these organizations is responsible for the analysis or interpretation of the data appearing in this report.
- ³ The 2001 survey data used in this report were not available when the book went to press.
- ⁴ These figures do not add up to 100 percent because of rounding error.
- ⁵ The gasoline price data are for the average price of gasoline in real, 1996 dollars. The data are from the U.S. Department of Energy, *Annual Energy Review, 2000*, table 5.22. These data are available on the web at: <http://www.eia.doe.gov/aer/>.