Political Support for a Green Recovery from the Covid-19 Pandemic in Rural America

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[This pre-print is currently under peer review.]

May 27, 2021

Abstract

Rural residents in the western United States, a politically conservative region reliant on natural resources and amenities tied to a land-based economy, strongly support government relief spending in response to the Covid-19 pandemic. Additionally, rural people show bipartisan support for low-carbon development in residents' local counties. These results suggest an opportunity for climate-conscious development policies that bundle pandemic recovery and climate change mitigation while securing sustainable rural livelihoods.

Main

The Covid-19 pandemic dramatically affected the social and economic well-being of rural communities across the world during a year of major climate-related disasters.¹⁻³ Indeed, rural regions are considered uniquely vulnerable to climate impacts due to their economic dependence on environmental resources.⁴ How governments reinvest in areas economically disrupted by the pandemic will likely influence future climate outcomes.⁵ We evaluate political attitudes in the rural United States (U.S.) toward government spending on pandemic relief and recovery, as well as towards local natural resource development preferences. In doing so, we contribute to ongoing research on rural economic transitions and climate change policy, providing evidence for policy-makers to better assess the political prospects for a “green recovery” from the Covid-19 pandemic.⁶ How climate and pandemic politics interact with one another in the U.S. will matter for global greenhouse gas emissions and the political momentum for global solutions to climate change. Furthermore, these changes will impact the prospects for equal access to economic opportunity and a clean environment for the most vulnerable in society—especially in rural places.

Rural communities have long faced structural barriers that heightened their vulnerability to the pandemic: higher poverty rates, greater exposure to labor market shifts, limited access to high-quality healthcare, and a population that is older and less healthy than the U.S. overall.⁷⁻⁹ The Covid-19 pandemic has led to record unemployment, severe food and housing insecurity, deteriorating mental and physical well-being, and significant overall life impacts.^{10,11} Initial relief efforts, such as U.S. government aid through the CARES Act, provided important resources for affected communities, such as expanded unemployment benefits and food assistance.^{12,13} These impacts make clear the importance of a recovery plan that meets the needs of rural economies reliant on natural resources in the western U.S. and across the world.

In this study we consider two important questions for long-term recovery: In the wake of the Covid-19 pandemic, what are rural people's political attitudes toward government relief? And to what extent do rural residents support different forms of natural resource development on the local level? Answering these questions is especially important for natural resource-dependent communities as the U.S. enters a period of disaster recovery in the years ahead. Policy proposals that link climate policy with economic development offer a means to address two linked crises afflicting vulnerable rural communities through bundled social

and climate policies, much along the lines of what some policymakers have described as a “Green New Deal.”^{14,15}

An important political test for such bundled environmental and pandemic relief policies will be how they fare in politically conservative regions with historical reliance on carbon-intensive resource economies. Such communities will play an outsized role in any future transition towards a low-carbon U.S. economy. To evaluate the political prospects of such policies in rural communities, we conducted a statistically representative survey of rural residents in the western half of the U.S., with questions focused on government relief spending and local natural resource-related development. This region was selected for its historical apprehension towards the federal government, traditional reliance on extractive industries such as mining, oil, and gas development, and political conservatism.¹⁶ In the 2020 U.S. presidential election, for example, the mean percentage of voters in our sample rural counties that voted for Donald Trump was 64.96%, representing a 3.18 percentage point increase in the mean vote share towards the Republican ticket compared to 2016 (also see Sup. Fig. 4).^{17,18}

Our survey was fielded in two waves during the summer of 2020 and the spring of 2021 (see map of counties in Sup. Fig. 4). First, just a few months into the pandemic, in summer of 2020, we asked survey respondents about different types of natural resource development in their county to examine political attitudes toward carbon-intensive resource development: “Regardless of how realistic you think it may be, how would you feel about increases in the following activities occurring in the county where you live? Please use a scale where 1 means ‘extremely opposed’ and 7 means ‘extremely supportive,’ with 4 meaning ‘neither supportive nor opposed.’” We converted these into three categories: support for a given development type (5-7), neither support nor oppose it (4), or oppose a given development type (1-3). We used this to determine the proportion of respondents who supported, opposed, or were neutral on various forms of development based on the numeric scores.

Figure 1: Natural resource development preferences in summer 2020. Error bars indicate the 95% CI.

There was strong support among respondents in summer 2020 for farming or ranching, solar, wind, and tourism, as forms of development. We found that 81.08%, CI [77.79, 84.37] of respondents supported farming or ranching, 66.57%, CI [62.59, 70.55] of respondents supported solar, and 58.75%, CI [54.69, 62.82] of respondents supported wind (see Fig. 1). Furthermore, the relative degree of opposition to these forms of development were low, all well below 20%. Surprisingly, those findings contrast with the lower levels of support for real estate, commercial logging, oil and gas, and mining development. The latter three of these development types were also associated with a notably polarized distribution of support and opposition depending on political party affiliation. Republicans were far more supportive of these development types than Democrats (see Sup. Fig. 3).

However - and importantly for our purposes in this study - there was a high degree of support among both Republicans and Democrats for solar, wind, and tourism. These findings suggest that clean energy is more popular than carbon-intensive forms of development, and yields a high degree of bipartisan support. Farming and ranching proved to be the most popular of all development types, and, although it is a significant contributor to greenhouse gas emissions, this suggests that policies to promote agricultural practices with a lower carbon footprint may find strong support in rural areas that prize this form of land use as an essential part of rural identities and landscapes.

Figure 2: Support for increased government relief spending in summer 2020 and spring 2021. Reported point estimates are from spring 2021. Error bars indicate the 95% CI.

Second, we assessed political attitudes towards government relief spending by asking respondents to rate a variety of forms of government spending on a scale where 1 meant 'much less spending' and 7 meant 'much more spending.' We converted these into categories of support for increased spending (5-7), keep spending at the same level (4), or decreased spending (1-3). We found that there was widespread support for increased government relief spending across a range of categories. Notably, these preferences were generally durable over the course of the pandemic and across two very different U.S. presidential administrations (see Fig. 2 and Sup. Tables 3-5). Here we focus on our results for spring of 2021. The strongest support for increased spending was for small business (74.34%, CI [71.1, 77.58]), followed by farmers (65.64%, CI [62.29, 69]), and then healthcare (60.94%, CI [57.34, 64.54]). These results speak to the popularity of spending on institutions that sustain the economic life and well-being of rural communities. Majority support among respondents for increased spending was also present for infrastructure (54.14%, CI [50.47, 57.8]), rent or mortgage relief (54%, CI [50.4, 57.7]), and direct relief to individuals (51.98%, CI [48.31, 55.64]). This reflects how rural places are reliant on infrastructure for economic activity and links to the outside world, making this an important area of support.

Support for increased spending in three other areas - clean energy companies, state government, and local government - was more mixed (see Sup. Table 3). While there is substantial support for clean energy companies, the fact it falls below 50% suggests that bundling environmental and social policy may be essential to garner enough public support to foster increased low-carbon development. Together these results evince widespread support for government relief spending, even across political party identification (see Sup. Fig. 4-5). Only two government spending areas stood out as having majority support for decreased funding. 74.05%, CI [70.88, 77.22] of respondents supported decreased government spending towards large business and 63.13%, CI [59.58, 66.69] supported decreased spending on oil and gas companies. These results demonstrate that carbon-intensive resource development and large for-profit organizations are favored for decreased spending, despite the fact that CARES Act tax relief and even paycheck protection funding greatly benefited these industries.¹⁹

In sum, these findings point to the strong support for government relief and recovery spending in response to the pandemic, as well as bipartisan support for low-carbon forms of development among rural residents. Recovery efforts can address the global threat of climate change at the same time as the socioeconomic disruptions of the pandemic. This requires substantial policy change to advance the well-being of rural communities with strong ties to natural resources at the same time as reducing carbon emissions.

The Covid-19 pandemic may provide a unique policy window for a green recovery. This study shows a surprising level of bipartisan political support among rural people in the western U.S. for pursuing policies that would offer new job opportunities to rural communities through low-carbon development, as well as government relief spending that would sustain rural livelihoods amidst a shift to a low-carbon economic future.²⁰

Methods

The survey was developed by researchers at Yale University, Utah State University, and New York University. The survey was fielded by a professional survey firm in two waves. The first wave was fielded from June 25 to July 22, 2020 and yielded results from 1,009 respondents. The second wave was fielded from March 1 to April 4, 2021 and yielded results from 1,203 respondents. In order to field our survey in a consistent manner across each wave, the second survey was also left open for five weeks and generated a higher number of responses. This is a representative survey of all rural counties across eleven western US states: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. The sampling frame only contained residents from counties that are categorized by the United States Office of Management and Budget as non-metropolitan. Two hundred and seventy-eight total counties were included in our sampling frame, and the results are representative of the population with a sampling error of $\pm 3.1\%$ at the 95% confidence level for both waves. Full question texts are included in the Supplementary Materials.

Households were selected randomly from the U.S. Postal Delivery Sequence File and matched with contact information from public databases. Selected households were contacted by phone, email, and postcard, and interviews were available in both English and Spanish. We utilized soft quotas and over-sampling in an attempt to collect representative responses from Native Americans, Latina/o's, and young adults - groups which are historically harder to reach in rural surveys (see Sup. Table 6). The survey's contact rate in wave one and wave two was 3.0% and 2.5% respectively. The complete interview response rate was 1.1% and 0.9% for wave one and wave two respectively, and was calculated using standard AAPOR rates. These contact rates are in line with the major declines in response rates seen in recent years.

We conducted all analyses with R Version 3.6.3. We implemented rake weights for difficult-to-reach populations, including Latina/o identity, Native American identity, age, sex, education level, and state. Descriptive point estimates are reported with a 95% confidence interval. The weighted sample was generally representative of the target population. The survey was conducted with approval from Yale University's Human Research Protection Program (exemption determination ID#2000027941).

Data and code availability:

All data and code used for this analysis are available at <https://osf.io/64ezg/>.

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Supplementary Materials

Figure 1: Natural resource development preferences by political ID in summer 2020. Error bars indicate the 95% CI.

Figure 2: Map of 2020 U.S. presidential election vote share in study sample of rural counties. Vote share margin in percentage points is on a scale of 1 to -1 in order to indicate vote share for Donald Trump (red/positive) and Joseph Biden (blue/negative), with darker shading indicating a higher margin of votes for that candidate.

Table 1: Natural resource development preferences, summer 2020

Development preference	Percent of respondents	95% CI
Farming or Ranching		
Support	81.08	77.79, 84.37
Neither	14.84	11.81, 17.88
Opposed	4.08	2.54, 5.62
Commercial Logging		
Support	41.89	37.81, 45.98
Neither	25.97	22.26, 29.68
Opposed	32.14	28.25, 36.02
Mining		
Support	35.43	31.5, 39.37
Neither	25.65	22.01, 29.28
Opposed	38.92	34.84, 43.01
Oil and Gas		
Support	40.39	36.34, 44.44
Neither	21.94	18.5, 25.38
Opposed	37.67	33.6, 41.74
Real Estate		
Support	44.74	40.61, 48.87
Neither	28.59	24.86, 32.32
Opposed	26.67	22.94, 30.4
Solar Energy		
Support	66.57	62.59, 70.55
Neither	22.26	18.68, 25.84
Opposed	11.17	8.58, 13.76
Tourism		
Support	56.81	52.63, 60.98
Neither	25.94	22.2, 29.68
Opposed	17.26	13.9, 20.62
Wind Energy		
Support	58.75	54.69, 62.82
Neither	22.02	18.74, 25.3
Opposed	19.23	15.9, 22.55

Table 2: Natural resource development preferences by party ID, summer 2020

Political party ID	Development preference	Percent of respondents	95% CI
Farming or Ranching			
Democrat	Support	67.91	60.23, 75.6
Democrat	Neither	23.66	16.55, 30.78
Democrat	Opposed	8.42	3.96, 12.89
Independent	Support	79.56	71.55, 87.57
Independent	Neither	16.31	9.01, 23.61
Independent	Opposed	4.13	0.36, 7.9
Republican	Support	90.34	86.82, 93.85
Republican	Neither	7.69	4.47, 10.9
Republican	Opposed	1.98	0.41, 3.55
Commercial Logging			
Democrat	Support	24.28	16.74, 31.82
Democrat	Neither	23.82	16.84, 30.8
Democrat	Opposed	51.89	43.8, 59.99
Independent	Support	34.37	24.74, 44.01
Independent	Neither	29.50	19.42, 39.59
Independent	Opposed	36.12	25.19, 47.05
Republican	Support	56.12	50.37, 61.87
Republican	Neither	25.09	19.98, 30.19
Republican	Opposed	18.79	14.17, 23.41
Mining			
Democrat	Support	16.11	9.66, 22.57
Democrat	Neither	20.99	14.15, 27.82
Democrat	Opposed	62.90	54.86, 70.95
Independent	Support	20.59	13, 28.17
Independent	Neither	27.85	18.54, 37.16
Independent	Opposed	51.56	40.76, 62.36
Republican	Support	50.06	44.32, 55.81
Republican	Neither	26.43	21.36, 31.5
Republican	Opposed	23.51	18.42, 28.59
Oil and Gas			
Democrat	Support	15.80	9.98, 21.62
Democrat	Neither	19.92	13.8, 26.03
Democrat	Opposed	64.28	56.7, 71.86
Independent	Support	23.86	15.73, 31.98
Independent	Neither	22.14	12.27, 32.01
Independent	Opposed	54.01	43.2, 64.81
Republican	Support	57.31	51.62, 63
Republican	Neither	23.56	18.64, 28.49
Republican	Opposed	19.13	14.64, 23.62
Real Estate			
Democrat	Support	41.70	33.67, 49.73
Democrat	Neither	25.96	19.29, 32.63
Democrat	Opposed	32.34	24.75, 39.93
Independent	Support	42.92	32.22, 53.63
Independent	Neither	28.17	18.13, 38.21
Independent	Opposed	28.91	19.08, 38.74
Republican	Support	48.59	42.85, 54.32
Republican	Neither	30.12	24.76, 35.49
Republican	Opposed	21.29	16.58, 26
Solar Energy			
Democrat	Support	85.96	80.64, 91.27
Democrat	Neither	8.29	4.25, 12.34

Democrat	Opposed	5.75	2.02, 9.47
Independent	Support	70.58	60.72, 80.45
Independent	Neither	23.96	14.61, 33.32
Independent	Opposed	5.46	0.97, 9.94
Republican	Support	56.84	51.11, 62.56
Republican	Neither	28.74	23.32, 34.16
Republican	Opposed	14.42	10.65, 18.19
Tourism			
Democrat	Support	64.50	56.7, 72.31
Democrat	Neither	21.17	14.8, 27.55
Democrat	Opposed	14.32	8.07, 20.57
Independent	Support	56.00	45.03, 66.97
Independent	Neither	26.44	16.36, 36.52
Independent	Opposed	17.56	8.87, 26.26
Republican	Support	53.85	48.06, 59.65
Republican	Neither	27.89	22.49, 33.3
Republican	Opposed	18.25	13.54, 22.97
Wind Energy			
Democrat	Support	74.66	67.4, 81.93
Democrat	Neither	13.86	8.61, 19.11
Democrat	Opposed	11.48	5.5, 17.46
Independent	Support	64.19	54.39, 73.98
Independent	Neither	23.59	15.08, 32.11
Independent	Opposed	12.22	6.32, 18.12
Republican	Support	48.62	42.87, 54.37
Republican	Neither	25.47	20.71, 30.24
Republican	Opposed	25.91	20.89, 30.93

Table 3: Government relief spending preferences

	Summer 2020		Spring 2021	
	Percent of respondents	95% CI	Percent of respondents	95% CI
Clean Energy Companies				
More Spending	43.33	39.2, 47.46	37.59	34.04, 41.14
Same Spending	28.52	24.78, 32.26	21.72	18.64, 24.8
Less Spending	28.15	24.43, 31.88	40.69	37.09, 44.29
Farmers				
More Spending	65.66	61.74, 69.58	65.64	62.29, 69
Same Spending	22.90	19.52, 26.28	21.27	18.38, 24.16
Less Spending	11.44	8.69, 14.19	13.09	10.87, 15.31
Healthcare				
More Spending	64.03	60.03, 68.03	60.94	57.34, 64.54
Same Spending	24.31	20.66, 27.97	22.89	19.74, 26.04
Less Spending	11.65	9.13, 14.18	16.17	13.49, 18.85
Rent or Mortgage Relief				
More Spending	52.33	48.21, 56.45	54.05	50.4, 57.7
Same Spending	28.23	24.77, 31.68	25.56	22.32, 28.8
Less Spending	19.45	16.21, 22.68	20.39	17.58, 23.2
Direct Relief to Individuals				
More Spending	53.62	49.52, 57.73	51.98	48.31, 55.64
Same Spending	24.37	21.03, 27.7	26.08	22.91, 29.25
Less Spending	22.01	18.71, 25.31	21.94	18.92, 24.96
Infrastructure				
More Spending	54.69	50.51, 58.87	54.14	50.47, 57.8
Same Spending	30.95	26.99, 34.91	25.68	22.39, 28.97
Less Spending	14.37	11.3, 17.43	20.18	17.3, 23.06
Large Business				
More Spending	9.66	7.44, 11.88	7.76	5.95, 9.57
Same Spending	27.67	23.9, 31.44	18.19	15.35, 21.03
Less Spending	62.67	58.66, 66.67	74.05	70.88, 77.22
Local Governments				
More Spending	42.37	38.25, 46.49	38.44	34.89, 41.99
Same Spending	31.24	27.44, 35.04	28.20	24.84, 31.55
Less Spending	26.39	22.7, 30.09	33.36	29.9, 36.83
Oil and Gas Companies				
More Spending	14.98	12.03, 17.92	17.54	14.69, 20.39
Same Spending	29.38	25.57, 33.2	19.33	16.45, 22.21
Less Spending	55.64	51.51, 59.77	63.13	59.58, 66.69
Small Business				
More Spending	78.90	75.6, 82.19	74.34	71.1, 77.58
Same Spending	13.32	10.76, 15.88	16.60	13.79, 19.41
Less Spending	7.78	5.4, 10.16	9.06	6.99, 11.12
State Governments				
More Spending	31.23	27.32, 35.13	30.33	27, 33.67
Same Spending	30.61	26.8, 34.42	27.11	23.79, 30.43
Less Spending	38.16	34.14, 42.18	42.56	38.92, 46.19

Table 4: Government relief spending preferences by party ID, summer 2020

Political party ID	Spending preference	Percent of respondents	95% CI
Clean Energy Companies			
Democrat	More Spending	74.44	67.87, 81
Democrat	Same Spending	15.67	10.5, 20.84
Democrat	Less Spending	9.90	5.24, 14.55
Independent	More Spending	47.26	36.46, 58.05
Independent	Same Spending	32.97	22.57, 43.36
Independent	Less Spending	19.78	10.55, 29.01
Republican	More Spending	27.27	21.98, 32.56
Republican	Same Spending	31.53	26.37, 36.7
Republican	Less Spending	41.19	35.52, 46.86
Farmers			
Democrat	More Spending	59.96	52.12, 67.8
Democrat	Same Spending	29.04	21.96, 36.12
Democrat	Less Spending	11.01	5.68, 16.33
Independent	More Spending	56.82	46.12, 67.53
Independent	Same Spending	24.05	15.88, 32.22
Independent	Less Spending	19.12	9.66, 28.59
Republican	More Spending	71.65	66.69, 76.61
Republican	Same Spending	18.82	14.63, 23.01
Republican	Less Spending	9.53	6.27, 12.8
Healthcare			
Democrat	More Spending	88.67	83.36, 93.99
Democrat	Same Spending	10.00	4.88, 15.11
Democrat	Less Spending	1.33	-0.33, 3
Independent	More Spending	60.28	49.7, 70.85
Independent	Same Spending	30.89	20.61, 41.17
Independent	Less Spending	8.83	4.1, 13.57
Republican	More Spending	53.54	47.8, 59.28
Republican	Same Spending	29.15	23.81, 34.5
Republican	Less Spending	17.30	13.06, 21.55
Rent or Mortgage Relief			
Democrat	More Spending	70.91	63.4, 78.42
Democrat	Same Spending	20.94	14.94, 26.94
Democrat	Less Spending	8.15	2.22, 14.08
Independent	More Spending	55.86	45.42, 66.3
Independent	Same Spending	28.88	19.88, 37.88
Independent	Less Spending	15.26	8.77, 21.74
Republican	More Spending	40.24	34.4, 46.08
Republican	Same Spending	33.29	28.18, 38.4
Republican	Less Spending	26.47	21.51, 31.43
Direct Relief to Individuals			
Democrat	More Spending	70.45	62.95, 77.94
Democrat	Same Spending	21.08	14.39, 27.77
Democrat	Less Spending	8.47	3.77, 13.18
Independent	More Spending	56.29	45.94, 66.65
Independent	Same Spending	28.13	19.29, 36.97
Independent	Less Spending	15.58	9.33, 21.82
Republican	More Spending	40.64	34.87, 46.4
Republican	Same Spending	26.03	21.27, 30.8
Republican	Less Spending	33.33	27.97, 38.69
Infrastructure			
Democrat	More Spending	66.86	59.19, 74.53
Democrat	Same Spending	25.95	18.78, 33.11

Democrat	Less Spending	7.19	2.97, 11.42
Independent	More Spending	50.68	39.78, 61.59
Independent	Same Spending	36.33	25.27, 47.39
Independent	Less Spending	12.98	5.81, 20.15
Republican	More Spending	52.33	46.56, 58.1
Republican	Same Spending	30.43	25.06, 35.81
Republican	Less Spending	17.24	12.52, 21.95
Large Business			
Democrat	More Spending	10.14	5.41, 14.86
Democrat	Same Spending	17.61	11.85, 23.37
Democrat	Less Spending	72.25	65.31, 79.2
Independent	More Spending	7.37	2.52, 12.23
Independent	Same Spending	35.22	24, 46.44
Independent	Less Spending	57.40	46.31, 68.5
Republican	More Spending	10.94	7.65, 14.24
Republican	Same Spending	30.19	25.05, 35.34
Republican	Less Spending	58.86	53.3, 64.42
Local Governments			
Democrat	More Spending	64.80	56.98, 72.61
Democrat	Same Spending	23.09	16.54, 29.64
Democrat	Less Spending	12.11	6.04, 18.19
Independent	More Spending	44.72	33.97, 55.47
Independent	Same Spending	31.28	21.1, 41.45
Independent	Less Spending	24.00	14.47, 33.54
Republican	More Spending	31.18	25.78, 36.58
Republican	Same Spending	35.60	30.13, 41.08
Republican	Less Spending	33.22	27.85, 38.58
Oil and Gas Companies			
Democrat	More Spending	8.54	4.09, 13
Democrat	Same Spending	17.99	11.93, 24.05
Democrat	Less Spending	73.47	66.45, 80.48
Independent	More Spending	8.80	2.88, 14.72
Independent	Same Spending	33.15	22.62, 43.68
Independent	Less Spending	58.05	47.21, 68.89
Republican	More Spending	21.71	16.87, 26.54
Republican	Same Spending	34.83	29.39, 40.27
Republican	Less Spending	43.47	37.78, 49.16
Small Business			
Democrat	More Spending	84.60	78.4, 90.8
Democrat	Same Spending	8.60	4.57, 12.63
Democrat	Less Spending	6.80	1.64, 11.96
Independent	More Spending	75.49	66.23, 84.75
Independent	Same Spending	13.67	7.29, 20.06
Independent	Less Spending	10.84	3.15, 18.53
Republican	More Spending	77.77	73.25, 82.29
Republican	Same Spending	14.64	10.93, 18.34
Republican	Less Spending	7.59	4.59, 10.6
State Governments			
Democrat	More Spending	55.39	47.27, 63.51
Democrat	Same Spending	25.49	18.53, 32.45
Democrat	Less Spending	19.12	11.93, 26.32
Independent	More Spending	32.03	22.28, 41.77
Independent	Same Spending	34.11	23.2, 45.03
Independent	Less Spending	33.86	23.84, 43.88
Republican	More Spending	18.91	13.86, 23.97
Republican	Same Spending	34.35	28.97, 39.74
Republican	Less Spending	46.74	41.04, 52.43

Table 5: Government relief spending preferences by party ID, spring 2021

Political party ID	Spending preference	Percent of respondents	95% CI
Clean Energy Companies			
Democrat	More Spending	74.37	68.7, 80.04
Democrat	Same Spending	18.61	13.33, 23.9
Democrat	Less Spending	7.02	4.1, 9.94
Independent	More Spending	29.30	20.63, 37.97
Independent	Same Spending	22.33	14.31, 30.35
Independent	Less Spending	48.37	38.99, 57.75
Republican	More Spending	13.45	9.33, 17.56
Republican	Same Spending	23.08	18.49, 27.67
Republican	Less Spending	63.47	58.04, 68.91
Farmers			
Democrat	More Spending	68.78	63.15, 74.42
Democrat	Same Spending	21.31	16.28, 26.33
Democrat	Less Spending	9.91	6.55, 13.27
Independent	More Spending	57.31	48.24, 66.38
Independent	Same Spending	24.13	16.46, 31.79
Independent	Less Spending	18.56	12.04, 25.08
Republican	More Spending	66.48	61.38, 71.58
Republican	Same Spending	19.83	15.58, 24.07
Republican	Less Spending	13.69	10.14, 17.24
Healthcare			
Democrat	More Spending	88.52	84.28, 92.76
Democrat	Same Spending	8.45	4.95, 11.95
Democrat	Less Spending	3.03	0.38, 5.68
Independent	More Spending	50.45	41.04, 59.85
Independent	Same Spending	28.43	19.51, 37.36
Independent	Less Spending	21.12	13.79, 28.45
Republican	More Spending	42.96	37.4, 48.53
Republican	Same Spending	31.25	25.99, 36.52
Republican	Less Spending	25.78	20.88, 30.69
Rent or Mortgage Relief			
Democrat	More Spending	78.61	73.83, 83.39
Democrat	Same Spending	15.72	11.42, 20.01
Democrat	Less Spending	5.68	3.23, 8.12
Independent	More Spending	52.82	43.44, 62.21
Independent	Same Spending	22.91	14.78, 31.03
Independent	Less Spending	24.27	16.46, 32.08
Republican	More Spending	36.13	30.69, 41.57
Republican	Same Spending	33.83	28.42, 39.25
Republican	Less Spending	30.04	25.03, 35.05
Direct Relief to Individuals			
Democrat	More Spending	74.48	69.08, 79.89
Democrat	Same Spending	18.25	13.41, 23.08
Democrat	Less Spending	7.27	4.17, 10.37
Independent	More Spending	47.36	37.96, 56.77
Independent	Same Spending	28.44	20.01, 36.86
Independent	Less Spending	24.20	16.21, 32.19
Republican	More Spending	36.04	30.54, 41.54
Republican	Same Spending	31.50	26.37, 36.63
Republican	Less Spending	32.46	27.21, 37.72
Infrastructure			
Democrat	More Spending	71.63	65.63, 77.63
Democrat	Same Spending	19.95	14.33, 25.57

Democrat	Less Spending	8.42	5.09, 11.75
Independent	More Spending	48.62	39.22, 58.02
Independent	Same Spending	27.15	18.57, 35.74
Independent	Less Spending	24.22	16.4, 32.05
Republican	More Spending	42.99	37.38, 48.6
Republican	Same Spending	28.63	23.6, 33.66
Republican	Less Spending	28.38	23.34, 33.41
Large Business			
Democrat	More Spending	9.09	5.52, 12.66
Democrat	Same Spending	15.43	10.96, 19.91
Democrat	Less Spending	75.48	70.13, 80.83
Independent	More Spending	7.25	2.9, 11.6
Independent	Same Spending	13.34	7.72, 18.97
Independent	Less Spending	79.41	72.54, 86.27
Republican	More Spending	7.20	4.71, 9.7
Republican	Same Spending	21.56	16.87, 26.26
Republican	Less Spending	71.23	66.2, 76.27
Local Governments			
Democrat	More Spending	63.82	57.68, 69.96
Democrat	Same Spending	24.19	18.44, 29.94
Democrat	Less Spending	11.99	8.25, 15.74
Independent	More Spending	32.49	23.6, 41.39
Independent	Same Spending	26.56	18.37, 34.75
Independent	Less Spending	40.95	31.7, 50.19
Republican	More Spending	21.22	16.76, 25.69
Republican	Same Spending	31.60	26.34, 36.86
Republican	Less Spending	47.18	41.54, 52.81
Oil and Gas Companies			
Democrat	More Spending	8.36	4.58, 12.15
Democrat	Same Spending	10.65	6.78, 14.51
Democrat	Less Spending	80.99	75.9, 86.08
Independent	More Spending	20.03	12.38, 27.68
Independent	Same Spending	18.48	11.33, 25.64
Independent	Less Spending	61.48	52.33, 70.63
Republican	More Spending	25.05	20.15, 29.95
Republican	Same Spending	26.61	21.67, 31.55
Republican	Less Spending	48.34	42.71, 53.97
Small Business			
Democrat	More Spending	86.33	81.69, 90.98
Democrat	Same Spending	11.21	6.69, 15.72
Democrat	Less Spending	2.46	1.09, 3.83
Independent	More Spending	68.35	59.55, 77.15
Independent	Same Spending	20.08	12.35, 27.8
Independent	Less Spending	11.57	5.72, 17.43
Republican	More Spending	68.84	63.61, 74.08
Republican	Same Spending	18.83	14.4, 23.25
Republican	Less Spending	12.33	8.62, 16.04
State Governments			
Democrat	More Spending	54.09	47.79, 60.38
Democrat	Same Spending	30.68	24.68, 36.67
Democrat	Less Spending	15.23	10.63, 19.84
Independent	More Spending	26.27	18.04, 34.51
Independent	Same Spending	24.64	16.49, 32.78
Independent	Less Spending	49.09	39.69, 58.49
Republican	More Spending	15.57	11.28, 19.87
Republican	Same Spending	22.33	17.73, 26.92
Republican	Less Spending	62.10	56.61, 67.59

Table 6: Demographic characteristics of sample and population

	Summer 2020			Spring 2021		
	N	Unweighted percent	Weighted percent	N	Unweighted percent	Weighted percent
Age						
18-29	46	4.56	10.39	106	8.81	12.43
30-39	95	9.42	23.29	143	11.89	20.57
40-49	143	14.17	16.33	195	16.21	15.00
50-64	281	27.85	28.58	341	28.35	28.00
65+	409	40.54	20.41	404	33.58	21.00
Sex						
Female	507	50.25	48.00	551	45.80	48.00
Male	481	47.67	50.00	624	51.87	50.00
Other	4	0.40	0.70	11	0.91	0.58
Latina or Latino						
Latina or Latino	71	7.04	14.67	109	9.06	14.53
Not Latina or Latino	895	88.70	81.11	1054	87.61	82.43
Race						
White	837	82.95	77.98	988	82.13	78.27
Black	2	0.20	0.09	13	1.08	1.30
Asian	2	0.20	0.08	13	1.08	0.88
Native American	23	2.28	4.00	31	2.58	4.00
Hawaiian or Pacific Islander	2	0.20	0.18	3	0.25	0.16
Mixed race	37	3.67	5.25	49	4.07	5.22
Other	48	4.76	6.65	47	3.91	5.25
Education						
Less than high school	17	1.68	2.50	29	2.41	3.65
High school or GED	159	15.76	24.23	150	12.47	19.49
Some college	251	24.88	38.54	326	27.10	40.74
Bachelors or Associates	331	32.80	21.55	406	33.75	21.80
Graduate or Professional Degree	239	23.69	12.94	278	23.11	13.36
State						
Arizona	34	3.37	4.97	51	4.24	5.00
California	138	13.68	13.75	215	17.87	14.00
Colorado	113	11.20	12.02	129	10.72	12.00
Idaho	93	9.22	9.19	105	8.73	9.00
Montana	134	13.28	11.04	119	9.89	11.00
New Mexico	105	10.41	11.05	80	6.65	4.00
Nevada	33	3.27	3.85	67	5.57	11.00
Oregon	128	12.69	11.08	142	11.80	11.00
Utah	55	5.45	5.03	74	6.15	5.00
Washington	116	11.50	12.05	147	12.22	12.00
Wyoming	60	5.95	5.98	74	6.15	6.00

^a Population estimates taken from the 2015-2019 American Community Survey (U.S. Census Bureau, 2020).

^a Values may not total to 100 due to non-responses and rounding.

Supplemental Description of Measurement

Survey Wave One (Summer 2020):

1. Support for natural resource development preferences were assessed by asking the following question: Regardless of how realistic you think it may be, how would you feel about increases in the following activities occurring in the county where you live? Please use a scale where 1 means “extremely opposed” and 7 means “extremely supportive,” with 4 meaning “neither supportive nor opposed.”

- Commercial logging
- Oil and gas development
- Wind energy development
- Real estate development
- Mining
- Tourism development
- Solar energy development
- Farming or ranching

2. Support for government relief spending preferences were assessed by asking the following question: Now, I am going to read a list of some areas of government spending related to the COVID-19 pandemic. For each of the following areas, please tell me how you would like to see government spending change in that area. Please use a scale where 1 means “much less spending,” 7 means “much more spending,” and 4 means you prefer “keeping spending at the same level.”

- Healthcare
- Infrastructure projects
- Relief given directly to individuals
- Rent or mortgage relief
- Relief to state governments
- Relief to city, town or county governments
- Relief for small businesses
- Relief for large businesses
- Relief to farmers
- Relief to oil and gas companies

- Relief to clean energy companies

3. Party identification was determined by asking the following set of questions: Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or something else?

- Republican
- Democrat
- Independent
- Other

If Republican in Q3, ask: Would you call yourself a strong Republican, or a not very strong Republican?

- Strong Republican
- Not a very strong Republican

If Democrat in Q3, ask: Would you call yourself a strong Democrat, or a not very strong Democrat?

- Strong Democrat
- Not a very strong Democrat

If Independent in Q3, ask: Do you think of yourself as closer to the Republican or Democratic party?

- Closer to Republican
- Neither
- Closer to a Democrat

Survey Wave Two (Spring 2021):

The second wave of the survey did not include questions about natural resource development preferences. The remaining questions were worded exactly the same except Q1, which included two additional relief spending areas, “Childcare” and “Relief to American Indian tribes.”