



Oregon Attitudes about Jordan Cove Energy Facility Siting
On-line Survey source: ResearchNow Jan/Feb 2018 & MTurk Jan/Feb 2018
Full survey sample combined sources N=1115; Source break-out avail. on request
Conducted by PolicyInteractive Research: info@policyinteractive.org
 (Sample is weighted, see methodology at end of survey - Columns may not total 100% due to rounding)
 Blue columns represent selected benchmark comparisons, buff columns present combined source totals

1. Are you a resident of Oregon and age 18 or older? [disqualify if "No"*)	Weighted C.District N=1115
Yes	100%

2. Do you think things in Oregon are going in the right direction or are things on the wrong track?	N=1115 %
Right direction	29
Wrong direction	33
In-between or unsure	39

3. Which of these two statements do you agree with more, even if neither represents your view exactly?	N=1115 Combined Strong+Lean %	N=1115 %
FEEL STRONGLY A: Economic growth should be given priority, even if the environment suffers to some extent.	36	11
Lean towards A		25
Lean towards B		34
FEEL STRONGLY B: Protection of the environment should be given priority even at the risk of slowing economic growth.	57	23

*no opinion omitted ~6%

4. An energy company is proposing new facilities to export fossil fuel from Coos Bay, a project called Jordan Cove. The proposal involves installing a 36-inch pipe across 229 miles of private and public land, storage facilities and a gas liquification plant, becoming the largest greenhouse gas emitter in Oregon. Proponents say it will create about 2000 temporary jobs and about 200 permanent jobs; they like the jobs and economic growth promises. Opponents say it will spoil public and private lands, require governmental condemnation of private property, and contribute to global warming from mining and burning fossil fuel. From what you know about this project would you say that you...	N=1115 Combined Strong+Lean %	N=1115 %
Strongly oppose the project		30
Lean toward opposing the project	57	27
Undecided or neutral	20	20
Lean towards supporting the project		16
Strongly support the project	22	6

5.1 Jobs and economic growth justify the project.	N=1115 Combined Strong+Lean %	N=1115 %
Strongly disagree	49	24
Lean disagree		25
Undecided or don't know	21	21
Lean agree	31	23
Strongly agree		8

5.2 Construction crossing steep forest lands will have negative impacts on watersheds, landowners and local communities.	N=1115 Combined Strong+Lean %	N=1115 %
Strongly disagree	19	5
Lean disagree		14
Undecided or don't know	19	19
Lean agree	63	28
Strongly agree		35

5.3 Fossil fuel projects should be prevented because it contributes to global warming, ocean acidification, sea level rise and habitat loss.	N=1115 Combined Strong+Lean %	N=1115 %
Strongly disagree	28	11
Lean disagree		17
Undecided or don't know	20	20
Lean agree	52	26
Strongly agree		26

5.4 The project should be built because of the free market principles of our democracy.	N=1115 Combined Strong+Lean %	N=1115 %
Strongly disagree	49	27
Lean disagree		22
Undecided or don't know	26	26
Lean agree	25	18
Strongly agree		7

5.5 Fossil fuels should be reserved for U.S. jobs and energy security within this country instead of exported to foreign countries.	N=1115 Strong+Lean Combined %	N=1115 %
Strongly disagree	18	7
Lean disagree		11
Undecided or don't know	31	31
Lean agree	52	32
Strongly agree		20

6. Hundreds of Oregon landowners own land the pipeline would need to cross. Condemnation (eminent domain) by government would be used against unwilling landowners. Does the use of government condemnation of private property for a private Canadian corporation affect your opinion?	N=1115 Strong+Lean Combined %	N=1115 %
Strongly increases support	8	3
Somewhat increases support		5
No change in support or opposition	26	26
Somewhat increases opposition	66	29
Strongly increases opposition		37
Total %	100	100

7. The Jordan Cove proposal allows up to 100% of the natural gas to come from Canada and be exported to Asian markets through Oregon. If you knew it was Canadian natural gas, not U.S. sourced gas serving the project would this increase or decrease your support?	N=1115 Strong+Lean Combined %	N=1115 %
Strongly increases support	10	2
Somewhat increases support		8
No change in support or opposition	47	47
Somewhat increases opposition	42	19
Strongly increases opposition		23
Total %	100	100

8. A recent report* found that the total greenhouse gas emissions of Jordan Cove would be above 36 million metric tons per year which is more than half of Oregon's present total of 62 million tons of greenhouse gas emissions. This report says that the liquefied natural gas (LNG) impacts from Jordan Cove are equal to those of burning coal. At this time, Oregon's energy policy aims at reducing greenhouse emissions dramatically each year to reach Oregon's, as well as the Paris Climate Agreement, goals. Proponents claim that natural gas is cleaner than coal and can serve as a bridge fuel toward non-fossil fuel options. From all things you know now, which statement comes closest to your view even if neither represents your view exactly? *(citation: http://priceofoil.org/2018/01/11/jordan-cove-lng-and-pacific-connector-pipeline-greenhouse-gas-emissions/)	N=1115 %
A. The revenue generated in Oregon and subsequent economic benefit from the project will more than offset any adverse effects to Oregon from climate change.	31
B. Climate change impacts are already threatening Oregon's economic and environmental future and Jordan Cove will have more cost than benefit to our state.	69
Total %	100

Q9. Which of these two statements comes closer to your view about the project: A. It is desirable because of the jobs and economic growth. OR B. It is undesirable because of private property rights and environmental impacts.	N=1115 %
A. It is desirable because of the jobs and economic growth.	31
B. It is undesirable because of private property rights and environmental impacts.	69
Total (may not total due rounding error)	100

Which of the following statements comes closest to your view even if neither represents your view exactly:

Q10. A or B: A: Too much power is concentrated in the hands of large corporations. OR B: Large corporations and companies have the necessary muscle to get good things done.	PEW 2014 national telephone N=10013* q.25n %	N=1115 Strong+Lean Combined %	N=1115 %
FEEL STRONGLY A: Too much power is concentrated in the hands of large corporations.	78	76	41
Lean towards A.			35
Lean towards B.			18
FEEL STRONGLY B: Large corporations and companies have the necessary muscle to get good things done.	18	24	6

*Pew 2014: 4% volunteer neither/both/don't know

Q11. A or B: A: It's best for the future of our country to be active in world affairs. OR B: We should pay less attention to problems elsewhere and concentrate on problems here at home.	PEW National 2014 N10013* %	N=1115 Strong+Lean Combined %	N=1115 %
FEEL STRONGLY A: It's best for the future of our country to be active in world affairs.	35	51	23
Lean towards A.			28
Lean towards B.			25
FEEL STRONGLY B: We should pay less attention to problems elsewhere and concentrate on problems here at home.	59	48	23

*Pew 2014: 6% volunteer neither/both/don't know

Q12. A or B: A: Abundant fossil fuels are necessary to power our economic prosperity. OR B. Renewable energy like wind and solar power is the most promising economic path with fossil fuels best left in the ground.	N=1115 Strong+Lean Combined %	N=1115 %
Feel Strongly A. Abundant fossil fuels are necessary to power our economic prosperity.	28	9
Lean towards A.		19
Lean towards B.	72	24

Feel Strongly B. Renewable energy like wind and solar power is the most promising economic path with fossil fuels best left in the ground.		48
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Q13. A or B: A: Our country would be better off if we all consumed less. OR B: We need to buy goods for the good of the economy.	PI Oregon Internet Dec '17 N=518	N=1115 Strong+Lean Combined %	N=1115 %
Feel Strongly A. Our country would be better off if we all consumed less.	32	75	40
Lean towards A.	36		35
Lean towards B.	30	26	17
Feel Strongly B. We need to buy goods for the good of the economy.	7		9

Q14. From what you've read and heard, is there solid evidence that the average temperature on earth has been getting warmer over the past few decades, or not?	PI IA Telephone Sept.2017 N=400 %	N=1115 %
Hoax. It's just not happening.	4	7
No solid evidence; we just don't know enough yet.	13	14
Yes, solid evidence. Mostly because of natural patterns in Earth's environment.	22	22
Yes, solid evidence. Mostly because of human activity such as burning fossil fuels.	54	48
Don't know	8	8
Total % (may not total due rounding error)	100	100

Oregon random dial cell/landline N=400 Sept 2017 full survey on request: info@policyinteractive

DEMOGRAPHICS

Mark your age category:			
	Oregon SOS Voter 2017* %	Oregon (US Census 2016* %	N=1115 %
Below 18 years of age	0	0	0
18-24			6
25-34	22	29	17
35-44	15	17	21
45-54	15	17	18
55-64	18	17	20
65 and above	31	20	18
Total	100	100	100

*note that the two data sources target registered voters who frequently vote, thus the census of general population age distribution will show higher percentage of lower age cohorts because younger ages do participate in elections as much as older cohorts.

What is your political party affiliation? - Selected Choice		
	Oregon SOS Voter Registration 2017 %	N=1115 %
Republican	31	27
Democrat	42	35
Non-affiliated or independent	27	36
Another party (please specify - 20 CHARACTER LIMIT)		1
Total		100

Irrespective of your political party registration, is your general tendency to vote more for a Republican or Democrat in an election?		
	Oregon SOS Voter Registration 2017 %	N=1115 %
Republican	31	35
Democrat	42	47
I try to avoid voting for candidates of either of the two major parties.	27 (other party or registration)	19
Total		100

The terms conservative, moderate, and liberal are sometimes used to describe how people feel about social and political issues. What best describes your own position, using these terms?		
	American National Election Studies 2017 %	N=1115 %
Very Conservative	11	10
Lean Conservative	13	19
Moderate	32	27
Lean Liberal	20	23
Very Liberal	16	14

Don't know NA	8	7
Total	100	100

Mark your gender		
	Oregon Census 20132016 %	N=1115 %
Male	48.4	48
Female	51.6	52
Decline to answer	--	1
Total		100

Indicate your household income last year, your best estimate will do.

	Oregon Census 2016 %	N=1115 %
Less than \$25,000	21	18
\$25,000-49,999	22	22
\$50,000-74,999	17	22
\$75,000-99,999	12	14
\$100,000–150,000	14	13
Above \$150,000	7	6
Decline to answer	--	5
Total		100

Optional: Do you have any comments you'd like to make about this survey or the current political scene? We appreciate any feelings or thoughts you may have, and we read comments carefully.

Open answers on request, to be attached to final as appendix		Response Percent	Response Total
1	Open-Ended Question	100.00%	237

Full Methodology available on request: info@policyinteractive.org

Brief methodology:

General: Survey designed and conducted by PolicyInteractive Research (PI), Eugene, Oregon. This is a non-statistical sample as defined by American Association of Public Research because it employs opt-in internet sampling. Two sources of respondent participation were employed: Mechanical Turk panel of 147 Oregon resident respondents and ResearchNow Panel of 985 Oregon citizen respondents. Both panels provide a token monetary reward of approximately one dollar for taking the survey, similar to inserting a dollar bill in an envelope in a traditional mail-out survey. The use of these panels is based on five years of respondent modeling opinion research and pilot projects of Oregon opinion. Our methods are partly driven by the dramatic drop in response rates in random dial telephone surveying and subsequent concerns about validity. PI has run a series of survey comparisons using both random dial opt-out telephone and opt-in internet sampling across six years of surveying finding that the two

sampling styles yield similarity generally within five percent variation. Greater variation in response characteristics are commonly observed in demographic variations in political party, gender, age, and regional identities, and weighting selected demographic skews are occasionally employed to address representativeness. The tables above present in a buff-colored background the percentages of total respondents by question response options and, where applicable, “strongly” and “lean” responses combined. The blue columns present benchmarks drawn from other sources we deem reputable and pertinent, including U.S. Census, Oregon Secretary of State, Pew Research Center, and others. A more detailed explanation is available on request.

Weighting: As mentioned above, it is optimal to obtain naturally run matches to key demographics of the population being studied. Nonetheless, sometimes sampling will skew outside of acceptable bounds of normal distribution. In practice, examination of sample distribution is undertaken after the sample is run naturally and collected. In this survey, key demographic distributions were acceptably distributed except for geographic location across Oregon. For this study, we selected Congressional districts as our geographic distribution to maintain numerical population counts of the districts approximate to $n=200$. **Congressional districts #3 and #2 were 7% and 4% below target, respectively.** These unacceptable deviations were corrected by proportional weighting of each congressional district using statistical software whereby each district was assigned greater or lesser influence. This brings the skews into alignment with these geographic district targets while retaining all participants. The consequences of the weighting had minor influence on response percentages, with changes commonly one percent or less.

Internet Surveys - How valid are they? As described above in "general," this survey employed two internet survey audience source providers to obtain Oregon public participants. A question often arises, why use internet surveying instead of telephone sampling? The explanation of pros and cons of telephone vs. internet polling can fill a book or take many pages of detailed discussion. For the ambitious reader willing to read something between a brief discussion and a series of books, we suggest reading Pew Research Centers excellent discussion: [Link to Mode Difference Study](#)ⁱ. Pew Research Center has released a series of studies and comparative results on the topic of telephone vs. internet sampling. The recent study titled “Does telephone interviewing understate support for President Trump” summarizes its results with: “[There is] little evidence that telephone versus online interviewing affects polling data on public support for key policy proposals.” As with Pew's comparative overview of public policy questions, PI's six years of telephone and internet sampling placed in side-by-side comparisons find differences are commonly less than 5%. Our objective is to obtain accurate representativeness of the population-- in this instance, Oregon. We follow recommended practices of knowing our sample providers, using of multiple providers to improve broader representation, controlling for geo-demographic skews, evaluating comparisons with valid benchmark indicators for consistency and application of post-survey weighting to bring influential demographic skews into alignment with the population.

With the question of “How valid are internet surveys,” one should also ask “How valid are telephone surveys?” Response rates to telephone surveys have plummeted over the past several decades to less than 10%, raising some questions as to how characteristic of the population are these people who are willing to undergo an interruption in their life to field a set of unexpected questions. We find that research shows both internet and phone are valid if properly administered. Importantly, those who use the information must understand that either mode is susceptible to various types of survey error. Research by others finds that several key advantages of internet sampling over telephone sampling include less sensitivity to social desirability response error, less sensitivity to clarity of verbal exchange over the telephone, less sensitivity to recency-latency question scale error, and improved disposition of respondent taking a survey at their choice of time compared to being interrupted by a random telephone call.

We invite critique of or feedback on our methodology at: info@policyinteractive.org.

ⁱ <http://www.pewresearch.org/2017/03/31/appendix-a-summary-of-mode-differences-by-question/>