

Empire State Poll 2013

Report: Natural Gas Drilling

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Introduction

This report summarizes attitudes toward natural gas drilling in New York State, as assessed by the 2010, 2011, 2012, and 2013 Empire State Polls (ESP) conducted by the Survey Research Institute at Cornell University. Results of other findings can be found at https://sri.cornell.edu/sri/esp.reports.cfm.

Methodology

- Each year, 800 telephone interviews were conducted, equally divided between the downstate and upstate regions, and then weighted to reflect the actual population distribution within the state. For the ESP, "downstate" is defined as New York, Rockland, Kings, Richmond, Westchester, Suffolk, Queens, Nassau, and Bronx counties, with the remaining counties of the state defined as "upstate."
- Using American Association for Public Opinion Research (AAPOR) standards, the cooperation rate was 74.5% in 2010, 71.4% in 2011, 67.1% in 2012, and 66.2% in 2013.
- The ESP utilizes a dual-frame random digit dial (RDD) sample of NYS households – covering landline and cell phone numbers. Eligible respondents must be residents of NYS and at least 18 years old.
- The margin of error (MOE) for questions with two response options among 800 respondents is 3.5% and is 4.9% for comparisons based on 400 respondents. The MOE may be smaller for some questions depending on the number of response options.

See Report 1: Introduction & Methodology for a full description at www.sri.cornell.edu.

Natural Gas Drilling

ESP 2010 and 2011 queried residents' attitudes toward natural gas drilling. The question asked: Which statement best reflects your opinion about natural gas drilling in New York State? 1. The revenues that would come to NYS from

natural gas drilling outweigh any risk of contaminating the drinking water, 2. The risk of contaminating the drinking water outweighs any revenues that would come to NYS from natural gas drilling, 3. Do not know enough about the natural gas drilling issue.

Table 1 Attitude Toward Natural Gas Drilling in NYS

_	Percent of Respondents							
Revenues versus Risks	N	YS* Downstate Upstate		Downstate		tate		
	2011	2010	2011	2010	2011	2010		
Revenues outweigh risks	27	25	25	20	30	35		
Risks outweigh revenues	52	53	54	59	50	43		
Do not know enough about drilling	21	22	22	21	20	22		

*Weighting applied to match actual distribution of upstate vs. downstate. Due to rounding, distributions may not add up to 100.

- In both 2010 and 2011, about twice as many respondents across the entire state felt that the risk of water contamination outweighed any possible revenues from natural gas drilling compared to those who believed the revenues outweighed any risk of contamination (53% and 52% vs. 25% and 27% respectively, see Table 1).
- In 2010, there was a significant difference between downstate and upstate residents' opinions. Downstate residents were three times more likely to report that the risk would outweigh the revenues (59%) compared to those who reported that the revenues outweigh the risk (20%). Far fewer Upstate residents reported that the risk would outweigh the revenues (43%) with 35% reporting that the revenues would outweigh the risk. This regional disparity decreased slightly in 2011 with more Upstate residents reporting that the risks outweigh the revenues than in the previous year.

Approximately one out of five respondents reported they don't know enough about the natural gas drilling regardless of region or year across the two years.

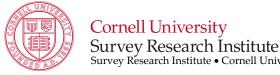


Table 2 Attitude Toward Natural Gas Drilling in NYS by Demographic Characteristics

	Percent of all Respondents*							
		nues gh risk		Risk outweigh revenues		: know n about ling		
	2011	2010	2011	2010	2011	2010		
Gender								
Male	29	30	52	49	19	21		
Female	25	21	52	57	23	22		
Race								
Non-white	21	17	59	64	19	19		
White	29	30	50	46	21	24		
Age								
18-24	19	14	69	68	12	18		
25-34	31	20	45	58	24	23		
35-44	25	28	53	49	22	23		
45-54	29	25	55	56	16	18		
55-64	24	28	55	48	21	23		
65+	27	25	47	53	26	22		
Household incon	ne							
Less than \$30,000	22	20	53	57	25	22		
\$30,000 to \$49,999	24	28	50	47	26	26		
\$50,000 to \$99,999	27	24	56	58	17	18		
\$100,000 or more	28	32	52	47	20	21		
Ideology								
Liberal	18	18	66	60	15	22		
Moderate	26	24	47	54	27	21		
Conservative	39	34	41	44	20	22		
Political Party								
Democrat	16	16	64	64	19	20		
Independent	28	30	53	47	19	23		
Republican	48	41	31	34	21	25		

*Weighting applied to match actual distribution of upstate vs. downstate. Due to rounding, distributions may not add up to 100.

• In 2010, more women than men (57% vs. 49% respectively) reported that the risk of water contamination exceeded the revenues that would be

- gained from natural gas drilling (see Table 2). No such gender disparity was found in 2011.
- In both 2010 and 2011, the majority of non-whites (64% and 59% respectively) and about half of whites (46% and 50% respectively) felt that the risk of water contamination outweighed the revenues. More whites than non-whites felt that the revenues from drilling outweighed the risk of water contamination (30% vs. 17% in 2010 and 29% vs. 21% in 2011).
- Across age groups, most respondents felt that the risk of contaminating drinking water outweighed the revenues, in both 2010 and 2011.
- Respondents with a household income between \$50,000 and \$99,999 were more likely to state that the risk outweighed the benefits (58% in 2010 and 56% in 2011).
- Liberals are much more likely to report that the risk outweighs possible revenues, increasingly so since 2011 (60% in 2010 and 66% in 2011).
- This trend is reversed for Moderates with fewer reporting that they feel the risk outweighs the revenues in 2011 compared to 2010 (47% vs. 54% respectively).
- Among key demographic groups (gender, race, age, household income, and ideology), the majority, or at least the plurality, of every subgroup reported that the risk outweighed the revenues in both 2010 and 2011.
- The one exception to this observation is based on political party affiliation. The majority of Democrats (64% in both 2010 and 2011) and about half of Independents (47% in 2010 and 53% in 2011) believed that the risk of contaminating drinking water outweighed the revenues. However, the plurality of Republicans (41% in 2010 and 48% in 2011) believed that the revenues outweighed the risk of drinking water contamination.

Energy Preferences

ESP 2011 then queried residents' energy preferences. The question states: If you had to choose only one, which of the following factors would you say is most important to your energy preferences? 1. Keeping energy costs low, 2. Protecting the natural environment, 3. Protecting the quality of life in my community, 4. Reducing foreign imports, 5. Minimizing health risks from pollution or accidents.

Table 3Energy Preferences

Em augus Parafanan sa	Percent of all Respondents			
Energy Preference	NYS*	Downstate Upsta		
Keeping energy costs low	16	15	19	



Protecting the natural environment	25	28	20
Protecting the quality of life in my community	18	19	15
Reducing foreign imports	22	19	27
Minimizing health risks from pollution or accidents	19	20	18

*Weighting applied to match actual distribution of upstate vs. downstate. Due to rounding, distributions may not add up to 100.

- While there was no clearly dominant priority across the state, one out of four respondents (25%) reported that the most important factor to their energy preferences was *protecting the natural environment* (see Table 3).
- Downstate residents were more likely to choose protecting the natural environment as the most import factor (28% vs. 20% of upstate residents), while upstate residents were more likely to choose reducing foreign imports as the most import factor (27% vs. 19% of downstate residents).
- The majority of respondents who chose factors among protecting the natural environment, protecting the quality of life in my community, and minimizing health risks for pollution or accidents, were also more likely to state that the risk of contaminating drinking water outweighed any possible revenues from natural gas drilling (63%, 61%, and 61% respectively).

Table 4 Energy Preferences by Demographic Characteristics

Tuble Thirty	11010101	Percent of all Respondents*						
	Keepin g energy costs low	Protecting the natural environmen t	Protecting the quality of life in my communit y	Reducin g foreign imports	Minimizin g health risks from pollution or accidents			
Gender								
Male	20	25	15	26	13			
Female	13	25	20	17	24			
Race								
Non-white	16	33	17	14	20			
White	17	22	18	24	19			
Age								
18-24	14	41	15	15	15			
25-34	14	19	19	24	24			
35-44	23	24	13	17	23			
45-54	15	24	12	28	21			
55-64	15	27	24	17	17			
65+	16	21	24	26	14			

Household income						
Less than \$29,999	23	20	22	14	21	
\$30,000 to \$49,999	14	31	17	20	17	
\$50,000 to \$99,999	14	26	19	21	20	
\$100,000 or more	17	22	12	28	20	
Ideology						
Liberal	11	30	20	18	20	
Moderate	20	24	14	20	22	
Conservative	20	20	17	29	14	
Political Party	y					
Democrats	13	30	21	15	20	
Independent s	16	26	13	22	22	
Republicans	23	16	15	34	12	

*Weighting applied to match actual distribution of upstate vs. downstate. Due to rounding, distributions may not add up to 100.

- Women were more likely to choose protecting the quality of life in my community or minimizing health risks from pollution or accidents as the most important factor (20% and 24% respectively see Table 4), compared to men (15% and 13% respectively). Men were more likely to choose keeping energy costs low or reducing foreign imports as the most important factor (20% and 26% respectively), compared to women (13% and 17% respectively).
- Whites were more likely to choose reducing foreign imports as the most important factor than non-whites (24% vs. 14% respectively), while significantly more non-whites chose protecting the natural environment (33% vs. 22% of whites).
- The plurality of respondents aged 18 to 24 (41%) chose protecting the natural environment as the most important factor.
- Respondents with a household income between \$30,000 and \$49,999 and between \$50,000 and \$99,999 were more likely than the other income brackets to choose protecting the natural environment as the most important factor (31% and 26% respectively). Respondents with a household income of \$100,000 or more were more likely than the other income brackets to choose reducing foreign imports (28%).
- Liberals and moderates were more likely to choose



- protecting the natural environment as the most important factor (30% and 24% respectively). Conservatives, on the other hand, were more likely to choose *reducing* foreign imports (29%).
- Democrats and Independents were also more likely to choose protecting the natural environment as the most important factor (30% and 26% respectively).
 Republicans, on the other hand, were more likely to choose reducing foreign imports (34%).

Impact of Shale Gas

In 2011, ESP also asked respondents to indicate how they expect shale gas development to impact the overall cost of living for New York State (whether it would get better, stay the same, or get worse – respondents were also able to answer that they were not familiar with the issue). In addition, ESP 2011 asked them to indicate if they agree or disagree with two statements: 1. The shale gas industry will provide economic opportunities that will help keep our children in NYS, 2. Only a few people in NYS will benefit from the shale gas development.

Table 5 Overall Cost of Living Impacted by Natural Gas Drilling by Demographic Characteristics

Demographic Chara	cteriotics					
Domoorenbies	Percent of all Respondents*					
Demographics	Get Better	Stay the Same	Get Worse			
Overall	39	33	28			
Gender						
Male	40	37	23			
Female	39	30	32			
Race						
Non-white	40	26	34			
White	39	35	25			
Age						
18-24	35	40	25			
25-34	29	34	37			
35-44	41	37	21			
45-54	42	33	24			
55-64	36	32	31			
65+	43	27	30			
Household income						
Less than \$30,000	49	23	28			
\$30,000 to \$49,999	39	26	35			

\$50,000 to \$99,999	36	37	27
\$100,000 or more	38	39	23
Ideology			
Liberal	32	33	35
Moderate	39	35	26
Conservative	49	33	19
Political Party			
Democrat	37	27	36
Independent	35	40	25
Republican	49	38	12

*Weighting applied to match actual distribution of upstate vs. downstate. Due to rounding, distributions may not add up to 100.

- The plurality of respondents (39%– see Table 5) who were familiar with the issue of shale gas development expected the cost of living to get better for NYS with this development. More than one out of four respondents (28%), on the other hand, expected the cost of living to get worse with shale gas development.
- The plurality of conservatives (49%) and moderates (39%) expected the cost of living to get better with shale gas development. Opinions of liberals were evenly divided (32% expected it to get better, 33% expected the same and 35% expected it to get worse).
- About half of Republicans (49%) expected the cost of living to get better with shale gas development. The plurality of independents (40%) expected the cost of living to stay the same. More than a third of Democrats either expected the cost of living to get better (37%) or worse (36%).

Table 6 Economic Opportunities of Shale Gas Industry by Demographic Characteristics

	Percent of all Respondents* Economic Benefits						
Demographic s		try will h children i			The Industry will benefit a few people		
	Agre e	Neutra 1	Disagre e	Agre e	Neutra 1	Disagre e	
Overall	39	21	40	52	20	29	
Gender							
Male	42	21	37	48	20	32	
Female	37	20	43	55	19	26	
Race							
Non-white	38	23	39	57	21	22	
White	40	20	40	50	19	31	
Age							



18-24	46	28	26	39	29	31		
25-34	32	25	43	56	26	18		
35-44	46	16	37	56	18	26		
45-54	42	18	41	46	21	33		
55-64	37	21	42	57	17	26		
65+	33	23	44	54	13	33		
Household inco	оте							
Less than \$30,000	41	24	34	41	22	37		
\$30,000 to \$49,999	41	21	37	55	20	25		
\$50,000 to \$99,999	37	17	46	54	22	25		
\$100,000 or more	39	23	39	51	16	33		
Ideology	-							
Liberal	34	17	49	62	16	21		
Moderate	32	30	38	45	26	29		
Conservativ e	52	17	30	45	17	38		
Political Party	Political Party							
Democrat	38	19	43	57	17	26		
Independen t	33	24	43	47	26	27		
Republican	57	18	25	44	16	40		

^{*}Weighting applied to match actual distribution of upstate vs. downstate. Due to rounding, distributions may not add up to 100.

Response categories were collapsed with Agree/Strongly Agree as "agree", Disagree/Strongly Disagree as "disagree" and Neither Agree Nor Disagree as "neutral."

- Respondents were divided on the question about whether the economic opportunities of the shale gas industry would help keep their children in NYS; two out five respondents (39%– see Table 6) agreed or strongly agreed with the statement and 40% of them disagreed or strongly disagreed.
- The plurality of liberals (49%) disagreed or strongly disagreed with the statement that the shale gas industry would help keep their children in NYS, while the majority of conservatives (52%) agreed or strongly agreed.
- The plurality of Democrats (43%) and Independents (43%) disagreed or strongly disagreed that the shale gas industry would provide economic opportunities that

- will help keep children in NYS, while the majority of conservatives (57%) agreed or strongly agreed with it.
- The majority of the respondents (52%) agreed or strongly agreed with the statement that only a few people in NYS will benefit from the shale gas development. More than one out of four respondents (29%) disagreed or strongly disagreed with this statement.
- Liberals were more likely than moderates and conservatives to agree or strongly agree with the statement that only a few people in NYS will benefit from the shale gas development (62% of liberals vs. 45% of moderates and 45% of conservatives).
- Democrats were more likely than Independents and Republicans to agree or strongly agree with the statement that only a few people in NYS will benefit from the shale gas development (57% of Democrats vs. 47% of Independents and 44% of Republicans).

Impact of Marcellus Shale Gas Development

In 2012, the ESP queried further about the Marcellus Shale gas development with three questions not asked in previous years. The 2013 survey included the same questions for comparison. The first question asks: How do you expect Marcellus Shale gas development will impact overall quality of life in the communities that are impacted by natural gas drilling (get better, stay the same, or get worse)?

Table 7 Overall Quality of Life Impacted by Natural Gas Drilling

	Percent of Respondents							
Overall Quality of Life	NYS*		Downstate		Upstate			
	2012	2013	2012	2013	2012	2013		
Get better	32	37	35	37	28	37		
Stay the same	23	19	24	20	21	17		
Get worse	45	44	42	42	51	46		

*Weighting applied to match actual distribution of upstate vs. downstate. Due to rounding, distributions may not add up to 100.

• The plurality of respondents (45% in 2012 and 44% in 2013 – see Table 7) expected Marcellus Shale gas development to worsen the overall quality of life in the communities impacted by drilling. However, more than one out three respondents queried in 2013 (37%) expected the overall quality of life to get better in these communities, a noted uptick from the previous year.



• More upstate residents in 2013 expected the overall quality of life to get worse (46%) than downstate residents (42%). However, this trend reverses from the previous year for the upstate respondents. An additional 9% of those surveyed in 2013 indicated quality of life getting better than in 2012, while 5% fewer reporting it would get worse.

Table 8 Overall Quality of Life Impacted by Natural Gas Drilling

by Demographic Characteristics

	Percent of all Respondents*					
Demographics	Get Better		Stay the Same		Get Worse	
	2012	2013	2012	2013	2012	2013
Gender						
Male	36	41	24	19	40	40
Female	29	34	21	19	50	47
Race						
Non-white	35	36	27	20	38	44
White	31	38	21	19	48	43
Age						
18-24	36	41	26	17	38	43
25-34	36	35	27	19	37	47
35-44	26	31	26	18	48	51
45-54	39	37	15	21	46	42
55-64	25	37	26	20	49	44
65+	34	44	20	20	46	37
Household income						
Less than \$30,000	29	33	32	20	39	47
\$30,000 to \$49,999	32	40	22	19	46	40
\$50,000 to \$99,999	27	36	22	18	51	46
\$100,000 or more	42	39	18	20	40	41
Ideology						
Liberal	22	29	17	18	61	53
Moderate	36	42	27	19	37	39
Conservative	43	45	26	22	31	33
Political Party						
Democrat	27	33	24	20	50	48

Independent	33	40	21	19	46	41
Republican	43	47	22	18	35	35

*Weighting applied to match actual distribution of upstate vs. downstate. Due to rounding, distributions may not add up to 100.

- In both 2012 and 2013, women more often reported that they expect the overall quality of life to get worse with shale gas development (50% and 47%, respectively see Table 8), compared to men (40%).
- Across income levels, respondents in 2012 with a household income of \$100,000 or more most often expected a positive impact from shale gas development (42%, see Table 8 for other income groups). However, this same group in 2013 reversed their outlook with slightly more respondents believing the impacts would be negative rather than positive (41% worse vs. 39% better). Additionally, respondents with a household income between \$30,000 and \$49,999 reversed their outlook as well, being more likely to expect a positive impact from shale gas development than they were in 2012 (40% vs. 32%, see Table 8 for other income groups).
- In both 2012 and 2013 liberals were significantly more likely to expect the overall quality of life to get worse with shale gas development (61% and 53%, respectively), compared to moderates (37% and 39%) and conservatives (31% and 33%). Conservatives, on the other hand, were more likely to expect a positive impact from gas development (43% and 45% vs. 22% and 29% of liberals, and 36% and 42% of moderates) in both years.
- Democrats and Independents were also more likely to expect a negative impact in both years (50% and 48% and 46% and 41%, respectively), compared to 35% of Republicans. Republicans, on the other hand, were more likely to expect the overall quality of life to get better (43% and 47%).

A follow-up question asked respondents: How sure are you about these effects on quality of life (very sure, somewhat sure, not very sure, not at all sure)? In 2012, nearly three out of four respondents were very or somewhat sure (73%). Fewer respondents were quite so sure in 2013, with 69% saying they were very or somewhat sure. Approximately one in ten respondents in both years (10% and 9%, respectively) were not at all sure about the quality of life effects.

Table 9 How Sure Natural Gas Development Effects on Quality of Life

Certainty of Gas Development	Percent of Respondents							
	NYS*		Dowi	nstate	Upstate			
	2012	2013	2012	2013	2012	2013		
Very sure	33	27	32	26	34	30		
Somewhat sure	40	42	41	39	40	47		
Not very sure	17	20	18	21	15	17		
Not at all sure	10	11	10	14	11	7		

^{*}Weighting applied to match actual distribution of upstate vs. downstate. Due to rounding, distributions may not add up to 100.

Finally, respondents were asked: Would you agree or disagree that local governments should be able to control whether or not to allow natural gas development in their jurisdiction? (However, note that some respondents answered a different version of this question: Would you agree or disagree that local governments should be able to control natural gas development in their jurisdiction? Results reported in Table 10 exclude these responses).

Table 10 Local Government Should Control Gas Development

Agreement	Percent of Respondents							
	NYS*		Downstate		Upstate			
	2012	2013	2012	2013	2012	2013		
Agree / Strongly agree	62	65	62	65	62	63		
Neither agree nor disagree	10	7	12	7	8	6		
Disagree / Strongly disagree	28	28	28	27	29	31		

^{*}Weighting applied to match actual distribution of upstate vs. downstate. Due to rounding, distributions may not add up to 100.

In both 2012 and 2013, the majority of respondents (62% and 65%, respectively – see Table 10) agreed or strongly agreed with the statement that local governments should be able to control whether or not to allow natural gas development in their jurisdiction. On the other hand, more than one out of four respondents in both years disagreed or strongly disagreed with it (28%).

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Citing Results from the ESP:

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