Utah State University

From the SelectedWorks of Peter D Howe

February 15, 2018

Utahns' perspectives on air pollution: Results from a 2017 statewide survey

Peter D Howe, *Utah State University* Jennifer E Givens, *Utah State University* D. Layne Coppock, *Utah State University*



Available at: https://works.bepress.com/peter_howe/53/

Utahns' perspectives on air pollution

Results from a 2017 statewide survey

Peter D. Howe Assistant Professor, Department of Environment and Society Utah State University peter.howe@usu.edu

Jennifer E. Givens Assistant Professor, Department of Sociology, Social Work, and Anthropology Utah State University jennifer.givens@usu.edu

D. Layne Coppock Professor, Department of Environment and Society Utah State University layne.coppock@usu.edu



Introduction

This report is based on findings from a survey of Utah residents conducted by Utah State University in July 2017. A quota sample of 1,307 adults (age 18 and over) were interviewed online. Results are weighted to represent the Utah statewide population using a statistical model accounting for age, gender, race/ethnicity, and county of residence. The average margin of error is \pm 6 percentage points at the 95% confidence level. For more details see Appendix (page 13).

Research was conducted as part of project 1210 funded by the Utah Agricultural Experiment Station.

Cite as:

Howe, Peter D., Jennifer E. Givens, and D. Layne Coppock. 2018. "Utahns' perspectives on air pollution: Results from a 2017 statewide survey." Utah State University. Logan, UT. 15 pp. Available at: <u>http://works.bepress.com/peter_howe/53/</u>



Executive Summary

This report presents results from a survey of Utah residents conducted in July 2017, focusing on public opinion about air quality and other public health and environmental issues in Utah.

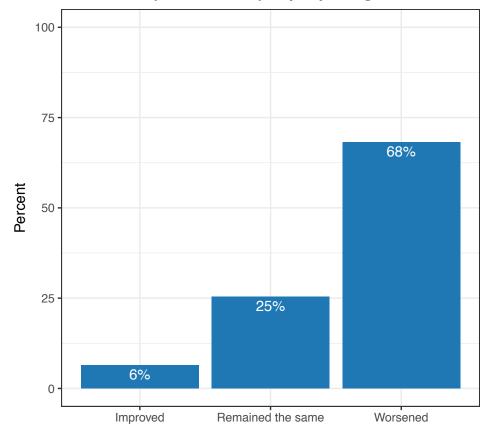
Air pollution is an issue of public concern in Utah. Research results reported here indicate a clear majority of Utahns feel air quality has become worse over the past generation, and that poor air poses a moderate- to high-level threat for personal well-being. Most respondents are worried about air pollution, and concerns are greatest in Weber and Salt Lake counties. Most people feel that winter is the season when air quality poses the biggest challenges, followed by summer. Industry and motor vehicles are seen as the major causes of air pollution.

A majority of survey respondents address air-quality problems themselves by conserving energy in the home and reducing driving and idling. Almost one-third have supported public initiatives to reduce air pollution. Smaller numbers carpool, ride bicycles, or take mass transit.



Most Utahns think air quality has gotten worse over the past 20 years

Over two-thirds of Utahns (68%) think their local air quality has gotten worse as compared to air quality 20 years ago. One-quarter (25%) think air quality has remained the same, while only 6% think it has improved.



How do you think the current air quality in your local area compares to the air quality 20 years ago?

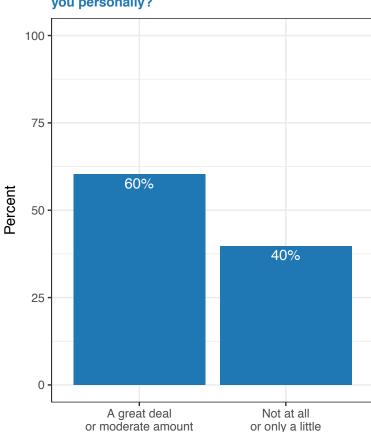
Figure 1: Perceived changes in air quality over the past 20 years.



UtahState

Utahns think they will be harmed by air pollution

When asked whether they think air pollution will cause them personal harm, a majority of Utahns (60%) think air pollution will harm them a moderate amount to a great deal. About 40% think that air pollution will harm them not at all or only a little.



How much do you think air pollution will harm you personally?

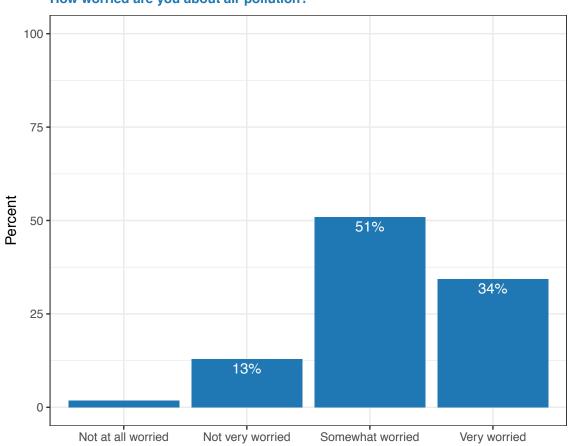
Figure 2: Perceived personal harm from air pollution.





Most Utahns are worried about air pollution

A large majority of Utahns (85%) are somewhat or very worried about air pollution, while one-third (34%) are very worried. Only 2% are not worried about air pollution.



How worried are you about air pollution?

Figure 3: Worry about air pollution.



Weber and Salt Lake County residents are most worried about air pollution

Within the state, the highest percentage of residents in Salt Lake County (91%) and Weber County (92%) report being somewhat or very worried about air pollution. Among the largest counties, residents of Washington County were the least likely to be worried about air pollution, although those who are worried still represent a large majority of residents (74%).

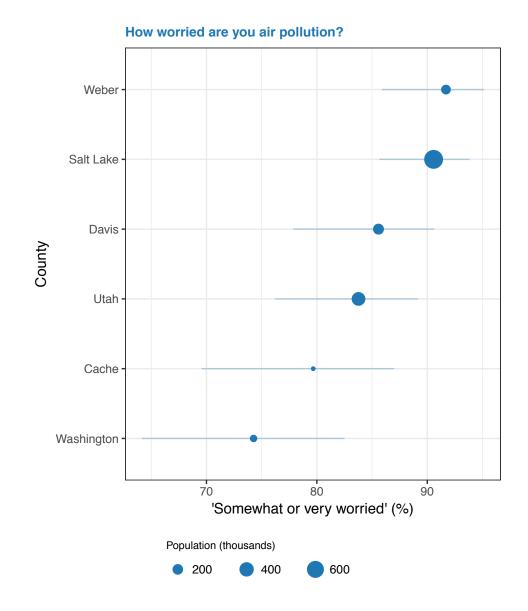


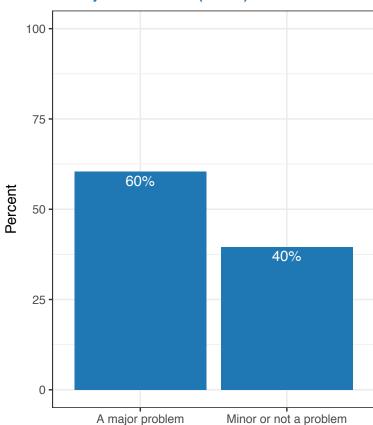
Figure 4: Worry about air pollution in large Utah counties. Lines indicate margins of error for each county.



Winter air pollution is seen as a major problem

Summer, Fall, and Spring air pollution mostly seen as a minor problem

60% of Utahns describe winter air pollution as a "major problem." By contrast, air pollution is a major problem for 30% of Utahns in the summer, 12% in fall, and 10% in spring.



During which seasons is air pollution a problem or not in your local area? (Winter)

Figure 5: Description of winter air pollution as a problem or not.





Winter air pollution rated as a major problem across northern Utah

More than 60% of residents in the most populated northern Utah counties describe air pollution as a "major problem" during the winter. By contrast, only 9% of residents in Washington County describe winter air pollution as a major problem.

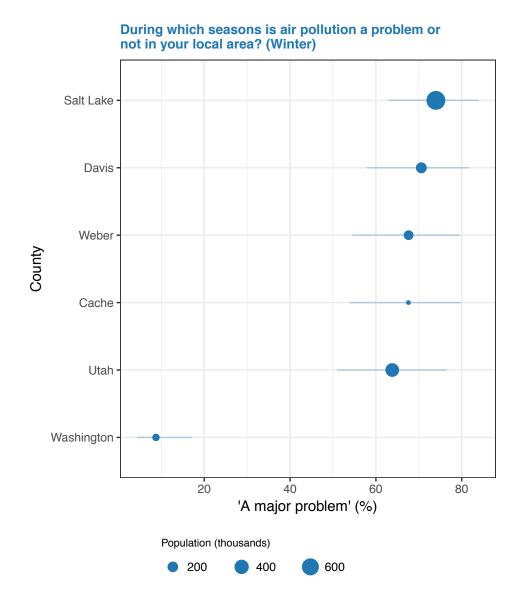


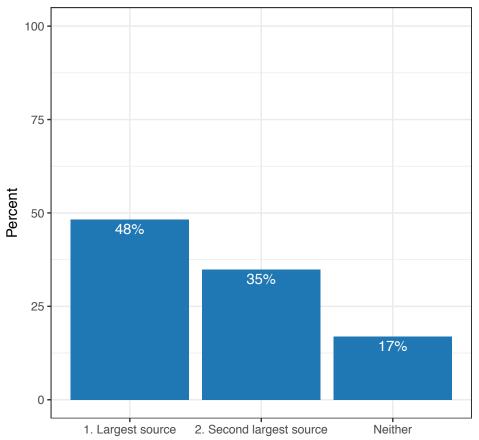
Figure 6: Description of winter air pollution as a "major problem" in large Utah counties. Lines indicate margins of error for each county.



Industry and vehicles ranked as most responsible for air pollution

About half of Utahns (48%) rank industrial sources (such as power plants, refineries, and factories) as contributing the most to air pollution in their local area. About one-third (35%) rank industry as the second largest source.

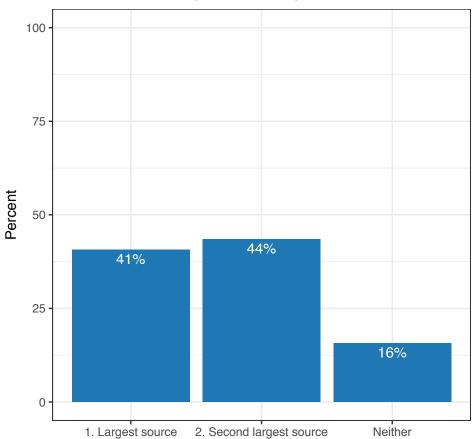
A slightly smaller share of Utahns (41%) rank vehicles (such as cars and trucks) as contributing the most to local air pollution. A similar number (44%) rank vehicles as the second largest source. Agriculture, homes, and other businesses were ranked as contributing the least to local air pollution.



Industry as source responsible for air pollution

Figure 7: Ranking of industry as a source of air pollution.





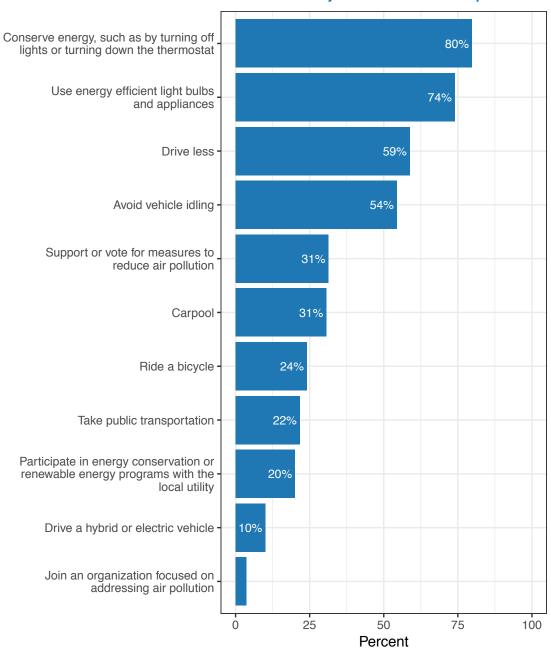
Vehicles as source responsible for air pollution

Figure 8: Ranking of vehicles as a source of air pollution.



Majority of Utahns conserve energy at home, drive less, and avoid idling to address air pollution

A large majority (80%) of Utahns are engaging in behaviors to conserve energy at home to address air pollution. A majority also report driving less (59%) and avoiding idling their vehicle (54%). About one-third (31%) report having supported or voted for measures to reduce air pollution.



What actions do you take to address air pollution?

Figure 9: Actions taken to address air pollution.



Appendix: Survey methodology

Survey interview dates: July 20 – July 26, 2017. Complete interviews: 1,307 adults (18+). Interviews were conducted online using a quota sample drawn from the Qualtrics panel.

Results are weighted to represent the Utah resident population using a multilevel regression and post-stratification (MRP) model. The model uses age, gender, race/ethnicity, and county of residence, combined with 2016 American Community Survey population counts. The average statewide margin of error is \pm 6 percentage points at the 95% confidence level. Margins of error for county-level estimates are presented in each figure.

Survey questions

- How do you think the current air quality in your local area compares to the air quality 20 years ago?
 - Air quality has improved
 - Air quality has remained the same
 - o Air quality has worsened
- How much do you think air pollution will harm you personally?
 - Not at all
 - Only a little
 - A moderate amount
 - A great deal
- How worried are you about air pollution?
 - Very worried
 - Somewhat worried
 - Not very worried
 - Not at all worried
- During which season(s) is air pollution a problem or not in your local area? Please rate the following from 1 (not a problem) to 3 (a major problem)
 [1: Not a problem; 2: A minor problem; 3: A major problem]
 - o Spring
 - Summer
 - o Fall
 - o Winter
- How much do you think different sources are responsible for air pollution in your local area? Please rank the following 4 categories based on how much you think



each contributes to air pollution each year in your local area. Drag and drop the category that contributes the most at the top (1), and the one that contributes the least at the bottom (4).

- Vehicles (such as cars and trucks)
- o Industry (such as power plants, refineries, and factories)
- Agriculture (such as farms and ranches)
- Homes and other businesses
- What actions do you take to address air pollution? Check all that apply.
 - o Drive less
 - o Drive a hybrid or electric vehicle
 - Avoid vehicle idling
 - o Carpool
 - Take public transportation
 - o Ride a bicycle
 - o Use energy efficient light bulbs and appliances
 - Conserve energy, such as by turning off lights or turning down the thermostat
 - Participate in energy conservation or renewable energy programs with the local utility
 - o Join an organization focused on addressing air pollution
 - Support or vote for measures to reduce air pollution



Survey demographics

Total	N (unweighted) 1,307	Percent, % (weighted) 100
Male	503	50
Female	804	50
18-24 years	182	17
25-34 years	312	22
35-44 years	242	19
45-54 years	158	15
55-64 years	205	13
65 years and over	208	14
White, non-Hispanic	1139	82
Hispanic or Latino	73	12
Black or African-American, non-Hispanic	16	1
Two or more races, non-Hispanic	27	1
Other, non-Hispanic	52	4
Less than high school graduate	21	2
High school graduate or equivalent	186	14
Some college or associate's degree	524	40
Bachelor's degree or higher	576	44
Salt Lake County	522	38
Utah County	201	18
Davis County	148	11
Weber County	115	8
Washington County	84	5
Cache County	69	4
Other counties	168	16

Weighted percentages calculated using a multilevel regression and poststratification (MRP) statistical model accounting for age, gender, race/ethnicity, and county of residence. Percentages are rounded to the nearest whole number.

