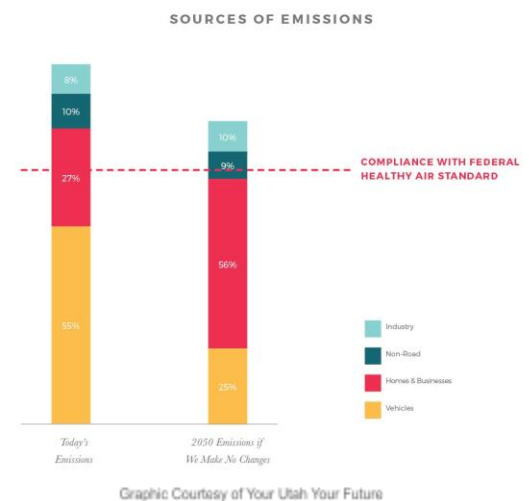


# Air Pollution in Utah

**The Air Pollution Issue:** Air pollution is a real thing in Utah, and the conversation around it has been consistent for quite a few years. In the wintertime, inversion traps pollution and Utah experiences low air quality. This has been extremely important to voters in the past. The urgency or severity of the issue is widely debated. A study by BYU found that air pollution can decrease life expectancy by 1.1-3.5 years. However, due to the amount of time inversion has been on the Wasatch Front, and the high life expectancy of Utah compared to other states causes this to come into question. With that in mind, air pollution is real, and is measurable. The air pollution issue, although real, does not seem to justify economic harm at this point. Calculating the economic harm caused by pollution is difficult, and a rough estimation at best.

**Policy Options and Observations:** Favorable policy options would include promoting electric vehicles and clean energy, and providing tax breaks for people and businesses who use them. This would be a solution to the issue while actually benefiting the economy, rather than hurting it. Some policy options that would theoretically work would be a carbon tax or mandated travel restrictions. However, the economic consequences of such policies could be detrimental, making these policy options unfavorable. The mandates and taxes would seldom be considered appropriate by Utahns, and would be considered government overreach. Solutions that guide market choice while still allowing it, and seeking to address where economic consequences may arise would be more effective.

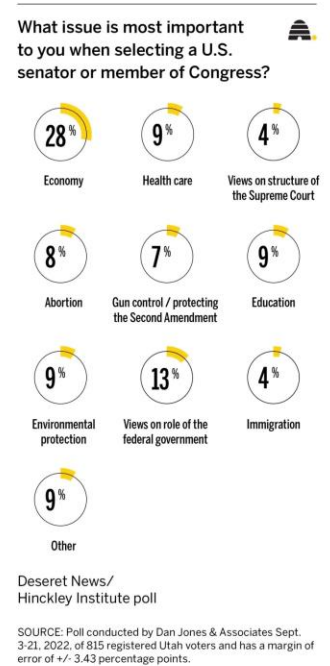
**Conclusion:** Air pollution is a real thing here in Utah, but the urgency is questionable, and the severity is questionable. There are legitimate policy options that do not cause economic harm, and would not need justification from questionable estimations of air pollution's economic consequences. While the circumstances are not dire, this approach is the most balanced, and reduces harm to the best extent. Markets solve problems, and promoting the market will help.



## Introduction and Problem Description:

**Air Quality Issues in Utah:** Utah has issues with air quality. It has often become a hot button issue for some voters. In Utah, the air quality has been considered to be bad for quite some time, and it is often said that it is becoming worse. The reality is, it is getting better. This brief looks into the air quality data, looking to give insight to whether or not the air quality issue is real, that bad, urgent, what is causing these air quality issues, and potential preventative solutions and policy options for the issue problem? And more.

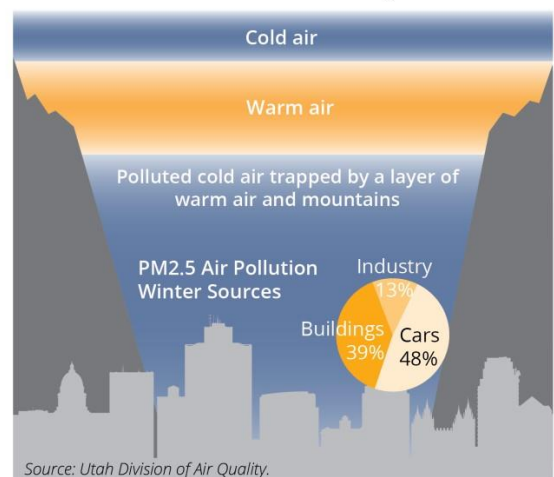
**Is Air Quality Important?:** Even if the air quality is bad, is the issue important? Bad air quality could pose health risks to the public. According to the Utah Foundation, air quality was the number 2 issue in 2016, with 68% of voters making it a high priority issue. However, in the 2022 elections, a poll by Deseret News and the University of Utah's Hinckley Institute found that only 9% of voters had environmental protection as a whole as their top issue.



Graphic Courtesy of Deseret News

**What Causes Bad Air Quality?:** In Utah, there is a lot of data regarding the air quality, and what causes it. Air pollution in Utah is either caused by or at least greatly magnified by inversion. The environmental phenomenon of inversion is frequently visible along the wasatch front in Utah. However, this often just traps the pollution that is already there, and makes it more visible and more of an issue. What other factors cause pollution? In the previously mentioned brief by the Utah Foundation, they cite the Utah Division of Air Quality in a graphic, demonstrating the causes of pollution.

### Causes of inversions and sources of pollution in the Wasatch Front and Cache Valley



Graphic Courtesy of the Utah Foundation



## Policy Options:

**Carbon Tax:** The carbon tax is essentially a tax on emissions. Pollution or expected pollution is taxed at a certain rate, which is often factored into the price of gas and electricity prices. The purpose of the carbon tax is to disincentivize usage of technology, appliances, vehicles, and other modern commodities that create pollution.

**Promote Electric Vehicles:** There are many ways the state can promote electric vehicles. One of the ways is in effect, a tax break for those who purchase electric vehicles. Fees and regulations could be cut or eliminated to promote electric vehicles. This could occur on both sides, for the consumer and business. A sales tax decrease on the purchase of electric vehicles would incentivize the purchase of electric vehicles. Additionally, electric vehicle manufacturers such as Tesla would be incentivized to come to Utah if these cuts were competitive. Eliminating the current state law that only allows auto dealerships to sell on one day of the weekend, at least for electric vehicles exclusively, would help electric vehicles compete in a more open market.

**Do Nothing:** Doing nothing is a real policy option here. The number of people this pollution impacts overtime could be extremely minimal, or it may generally impact people that could have health conditions triggered by conditions that are harmless to people otherwise. Although there are arguably negative economic impacts of air pollution, the economic impacts of regulations and mandates aimed at mitigating air pollution could be worse; which would be the biggest reason to do nothing.

**Provide tax incentives for less pollution:** Similar to the incentives to purchase electric vehicles, incentives to decrease pollution through tax cuts could be beneficial. For example, a cut on state and municipal sales tax on clean energy could incentivize people to use clean energy (there is a clean energy option available through Rocky Mountain Power's Blue Sky program, for example). Additionally, flexibility for remote work could be incentivized through income tax cuts to employees and the taxes a respective business would pay. Lastly, property taxes could be cut at the state and municipal level for homes and businesses that run on clean energy and decrease pollution.

## Policy Comparisons:

**Favorable Policy Options:** Favorable policy options to combat air pollution are tax incentives and promoting electric vehicles. Keeping more money in the hands of taxpayers is an economic benefit, and taking money from them takes efficiency and wealth out of the economy. These incentives would be able to combat air pollution issues while creating a benefit for the economy, while disincentives are generally economically harmful. Promoting clean energy would likely be more effective than just promoting electric vehicles, but the implementation of both would be beneficial. Having electricity and energy be clean addresses the root issue, while electric vehicles are less effective at combating pollution if the electricity they use is harnessed from burning coal.

**Unfavorable Policy Options:** Unfavorable policy options would include a carbon tax and doing nothing. The carbon tax would simply make gas and electricity more expensive, and while people may be more conscientious regarding turning off lights and making more efficient errand runs, the bulk of the issue would not be addressed. People would simply need to pay more money to go to work and run necessary errands, and these things are not flexible. If the goal is to price people out of commuting, cars, and essentially their jobs, then the economic consequences are clear. It would also simply create a pay-to-play system where people who make less are priced out of the ability to drive to work, for example, and corporations who can pay the emissions costs continue to pollute. Doing nothing would be unfavorable, as studies indicate air pollution is indeed a problem, but it would likely be favorable compared to the economic consequences of a carbon tax, mandated travel restrictions, or other forms of regulations that have negative economic consequences.

## Conclusion:

Although air pollution is a thing in Utah, the number of people it affects is questionable, and the extent to which it really affects us is debatable as well. Due to the fact that this is genuinely not a crisis, the urgency and severity of the issue is likely low. Regardless, addressing the issue is still important, and doing nothing could have negative consequences in the long term.

Addressing the problem without causing economic harm is the reasonable route of action.

## References:

-*Utah priorities 2016, issue #2: Air Quality*. Utah Foundation. (2016, October 12).

<https://www.utahfoundation.org/reports/utah-priorities-2016-issue-2-air-quality/>

-Romboy, D. (2022, October 8). *What Utah voters see as the top issue for choosing a senator, congressperson*. Deseret News.

<https://www.deseret.com/utah/2022/10/8/23391754/most-important-issue-for-utah-voters-economy-inflation>

-*Air Quality in Salt Lake City*. IQAir. (Accessed and last updated March 24th 2024).

<https://www.iqair.com/us/usa/utah/salt-lake-city>

-Isabella M. Errigo et al. "*Human Health and Economic Costs of Air Pollution of Utah*". Brigham Young University, College of Life Sciences/. (January 23rd 2020). <https://pws.byu.edu/ben-abbott-lab/human-health-and-economic-costs-of-air-pollution-in-utah>

-*Deseret news: 1881-12-21: Page 6: Editorials*. Utah Digital Newspapers. (n.d.-a).

<https://newspapers.lib.utah.edu/ark:/87278/s6fx851d/2634016>

-Centers for Disease Control and Prevention. (2022, August 24). *Life expectancy at birth by State*. Centers for Disease Control and Prevention.

[https://www.cdc.gov/nchs/pressroom/sosmap/life\\_expectancy/life\\_expectancy.htm](https://www.cdc.gov/nchs/pressroom/sosmap/life_expectancy/life_expectancy.htm)

-*Your Utah, your future - background: Air Quality in Utah*. Your Utah, Your Future - Home. (n.d.).

<https://yourutahyourfuture.org/topics/air-quality/item/44-background-air-quality-in-utah>