STUDENTS FOR DEMOCRACY

JOURNAL REVIEW
FALL 2023

Students for Democracy

Research. Educate. Advocate.

Students for Democracy

Sustainability

Fall 2023

Letter from the Executive Board

Dear Reader,

We are excited to present the Fall 2023 version of the *Students for Democracy Journal.* We are extremely proud of our members for their hard work and dedication over the past few months.

This semester, SFD members voted to focus on the urgent issue of the Climate Crisis. As concerns over environmental issues become more prevalent, the importance of prioritizing sustainability has never been more crucial. Due to this pressing need, our members have focused on research and advocacy throughout Ann Arbor to address the struggles our planet is facing.

Founded on three basic pillars- to research, to educate, and to advocate- members have learned how to do all three over the course of this past semester. First, they learned how to conduct thorough and unbiased research while consulting with experts in their respective policy areas. Second, they learned to write clear, concise, and unbiased policy briefs with histories, options for change, and unique recommendations for policy solutions. Finally, members presented their findings to their peers, family, experts whom they had previously consulted with, and the general public.

While you, as our reader, may only see the final policy brief produced by each group, it's essential to recognize the countless hours of hard work invested in achieving our end results. As the SFD executive board, we are extremely grateful that our members have taken their invaluable time to work on SFD research. We hope that the content of these briefs will inspire discourse surrounding these policy areas and inspire future policy action. We sincerely hope that you enjoy reading the Journal as much as we have enjoyed producing it and working with our fall 2023 membership.

Sincerely,

Caitlin McCurry, President
Samantha Rich, Vice President of Research
Sophia Filipof, Vice President of Advocacy
Elijah Kaufman, Vice President of Finance and Operations
Kada Durakovic, Vice President of Membership
Emma Goodman, Vice President of Professional Development
Haley Brettschneider, Vice President of Marketing

Acknowledgements

Students for Democracy would like to extend a special thank you to the many experts who took the time to speak with and educate members on sustainability.

SFD appreciates your help!

Students for Democracy Executive Board (1/2)

Caitlin McCurry | President
Caitlin McCurry is a junior studying Public Policy, focusing on Inequalities in Healthcare and Education with a minor in Political Science. In the future, she hopes to work in education and poverty policy prior to attending law school. Upon earning a law degree, she hopes to work in a career involving the intersection of policy and law.

Samantha Rich | Vice President of Research
Samantha is a junior studying Community & Global Public Health with a minor in Community Action & Social Change. Outside of SFD, she is the Government Editor for The Michigan Daily, a member of a public health advocacy organization, and a volunteer with Food Gatherers. Samantha is interested in health policy and communication and hopes to pursue a master's degree in public health after graduation.

Sophia Filipof | Vice President of Advocacy
Sophia Filipof is a junior studying Political Science and Psychology. Outside of SFD Sophia is a member of Kappa Alpha Pi a pre-law fraternity and FATE a mentorship program for high schoolers in Detroit. In the future Sophia plans to attend law school to study more about child advocacy law.

Elijah Kaufman | Vice President of Finance and Operations
Elijah Kaufman is a sophomore studying Data Science and Political Science. Outside of SFD, Elijah is a project manager at Michigan Political Consulting and a data analyst for the Michigan Data Science Team. In the future, he hopes to work in data analysis roles for political campaigns and in quantitative public policy analysis

Kada Durakovic | Vice President of Membership
Kada is a sophomore from Montville, New Jersey, majoring in Political Science and minoring in Community Action and Social Change (CASC). She joined Students for Democracy the first semester of her freshman year and researched reproductive and education policy. In the future, Kada hopes to pursue a career in non-profit work in humanitarianism or immigration.

Students for Democracy Executive Board (2/2)

Emma Goodman | Vice President Professional Development
Emma Goodman is a sophomore hoping to study Public Policy with a minor in Law, Justice, and Social Change. Outside of SFD she is involved in research on campus exploring the intersection of psychology and social justice. In the future, she hopes to attend law school and work in politics or civil rights litigation.

Haley Brettschneider | Vice President of Marketing
Haley is a sophomore looking to study public policy with an emphasis on the intersection of mental health and criminal justice. Outside of SFD, Haley manages Hopelessly Yellow, a digital brand highlighting mental wellness and positivity through writing, design, music, and media. Haley worked with honorary Judge Ellen Biben who presides over the Alternative to Incarceration court in Manhattan.

Table of Contents

Policy Briefs

Addressing Electric Vehicle Production Pollution Through Public Policy

Leo Auerbach, Mead Gibson, Ella Gurfein, Jack Tirsch

Executive Summary:

Our group is focusing our project on the automotive industry and its contribution to limiting carbon emissions. As the second-largest auto manufacturing nation in the world and a leader in the realm of climate policy, the US must set the standard for climate action within the automotive industry. Michigan's automotive industry accounts for a significant amount of all auto manufacturing in the country and auto legislation in the state serves as a prism to federal automotive legislative standards. Our project focuses on the issues of tire pollution and recycling, the environmental impact of the materials involved in EV production, the scale on which EVs are produced, and the usage of clean energy in the charging of electric vehicles. We have compiled several policy options and recommendations in order to promote environmental transparency and cleanliness within the EV production process. Our final policy recommendation involves requiring automotive manufacturers to use sustainable tires in the production of their vehicles. This policy is designed to increase demand for sustainable tires, hoping to spur production for these products and reduce tire pollution on the roads.

Background:

Currently, the climate crisis is a problem that has snowballed over the past decade. Specifically in the United States, there have been more movements by experts and political leaders towards sustainable practices and climate awareness amid rising temperatures and pollution. Since the inception of gas-powered cars in 1886, they have contributed to pollution all over the world. Electric vehicles (EV) were later developed to offer an alternative to gas-power vehicles. Gas-fueled cars produce carbon emissions — emissions stemming from the burning of fossil fuels and the manufacture of cement — which are the greenhouse gasses with the highest levels of emissions in the atmosphere. Carbon emissions trap the sun's heat which leads to global warming and climate change. At the end of the 20th century, there was a mix of federal and state laws that created new regulations in the automotive industry to allow electric vehicles to achieve the same performance as gas-powered vehicles with less carbon emissions. Today, some of the most prominent automotive manufacturers are producing electric vehicles, leading to more widespread use. Electric vehicles use no gasoline and have no tailpipe emissions, and even counting the emissions from manufacturing them and producing electricity, they are cleaner than similar hybrids, and significantly cleaner than conventional gas- and diesel-powered vehicles (NPR, 2023).

Although electric vehicles have a lower amount of carbon emissions, they are still not as popular in comparison to gas-fueled vehicles as EVs often have a higher price and consumer concerns regarding charging the battery. Globally, the transportation sector is responsible for about ⅛ of greenhouse gas emissions (Climate Trade, 2023). According to the U.S. Environmental Protection Agency, transportation is responsible for roughly 45% of nitrogen oxide total emissions in the country (Environmental Protection Agency, 2023). Two of the most commonly emitted gasses from cars are nitrous oxide and methane which trap heat within the Earth's atmosphere, thus catalyzing environmental warming. The urgency of the issue is only rising and its impacts are becoming increasingly detrimental, so it must be addressed in order to prevent the ultimate, irreversible dangers of environmental warming.

Policy Options

1. *More Sustainable Materials Requirement*

Specifically in the state of Michigan, a policy to give automotive manufacturers further purchasing preference for more sustainable materials can improve the climate-friendliness of both electric and gas-powered vehicles. Currently, a more sustainable form of steel than the type that is most widely used does not have enough demand to spur an increase in production (Rocky Mountain Institute, 2023). Therefore, it is more difficult to obtain and use as input in the automotive industry. However, if legislation is passed to increase demand for more sustainable steel, this could have a positive impact on the production and usage side of vehicles. Increase preference for purchasing products and services that have positive impacts on the environment in order to reduce overall usage of those with negative effects. Sustainable steel is typically lighter than regular steel and would help reduce the weight of automobiles which could limit the amount of tire pollution and damage to local infrastructure.

2. *Minimum Number of EVs Produced Per Year*

Place a minimum for the production of EVs to make them more accessible to consumers and cut back on vehicle emissions from gas-powered cars. The Environmental Protection Agency (EPA) proposed new standards regarding vehicle emissions in early 2023, yet currently, EVs make up just over 7% of sales. BloombergNEF recently projected they're on pace to hit 28% by 2026, which is not on track to meet EPA's target (NPR, 2023). As manufacturers make more EVs, it will help them meet the fuel economy standards, which are calculated across a manufacturer's entire fleet. Michigan accounts for 17% of the U.S.' automotive production so being able to achieve this will distribute a good portion of EVs around the country. However, prices for the production of EVs increased by 140% from March 2020 to 2022; materials also cost 125% more than combustion engine vehicles. To alleviate this, the federal government could impose a price ceiling to cap costs for inputs necessary to build an EV fleet. The UAW, a powerful player in the automotive industry, has backed the increased production of electric vehicles with the guarantee that automakers ensure job security for union workers. EV production loomed over the recent contract negotiations between the UAW and auto manufacturers.

3. *Use of Clean Energy for Charging*

Electric vehicles are designed to reduce carbon emissions, but if they are charged using fossil fuels, they can have the opposite effect. Since most of the U.S. uses fossil fuels as a major source of energy, charging electric vehicles can indirectly produce greenhouse gasses (Columbia Climate School, 2023). Instead, requiring households that purchase electric vehicles also to have some form of clean energy to accompany it will benefit the climate. Clean energy sources include wind, solar, and geothermal, among other forms (U.S. News, 2023).

Along the lines of President Biden's Executive Order 14057, an in-state plan in Michigan would create more public charging infrastructure and alleviate this issue of dirty energy use by electric fleets.

4. *Recyclable Tires for EVs*

One major difference between electric vehicles and combustion-engine vehicles is that EVs are significantly heavier. This is due to the weight of the input materials used in production. As a result of these differences in weight, EVs tend to emanate excess tire pollution on the roads. According to Tan et al., "There is emerging evidence that tire wear particles and other particulate matter may contribute to a range of negative health impacts including heart, lung, developmental, reproductive, and cancer outcomes" (2023). There are even studies that show car tires emit more harmful pollutants than tailpipes. Surprisingly, regular tires and brake usage has been shown to produce more particle pollution, by mass, than car exhaust systems (Washington Post, 2023). Currently, the state of Michigan has the Scrap Tire Program which requires proper disposal of tires and tire waste. Michigan could instate a policy that would require electric vehicle manufacturers to use tires made from exclusively recyclable materials, such as those used by Michelin in its 4R strategy to reduce tire waste (Michelin, 2018).

Recommendation:

After analyzing the potential policy options to address the climate crisis in the automotive industry, it is recommended that Michigan instates a requirement for electric vehicle manufacturers to use more sustainable tires for their products. This policy option appears most feasible out of all of the available options and may be less costly. Additionally, since some manufacturers such as Tesla have already begun implementing more environmentally-friendly tires on its products, it may be the most appropriate and realistic option. Specifically in the U.S. cars emit, on average, 5 pounds of tire particles a year (Emissions Analytics, 2023). Additionally, 200,000 tons of tire pollution end up in oceans each year (Tan et al. 2023). So it is evident that non-sustainable tires are extremely wasteful and can cause damage to the environment and its inhabitants. Furthermore, the consequences of pollution given off by vehicle tires can cause several respiratory and general health issues (Tan et al.).

A new policy that would require manufacturers to use more environmentally friendly tire products would surely cut back on these damaging effects. To do this, Michigan would subsidize the cost for manufacturers to use sustainable tire products. This policy would effectively increase the demand for these tires and make them more widespread. Rather than increasing demand, Michigan should also attempt to create legislation that forces the automotive industry to standardize the use of sustainable tires. This option is also politically feasible given that federal and state governments have agreed to administer tax credits for qualifying individuals who purchase electric vehicles. The benefit of this policy is immense as the state of Michigan would add more sustainable vehicle tires into circulation and cut down on tire pollution on the roads. On a more surface level, reducing tire pollution would make local infrastructure cleaner and require fewer tax dollars for public cleaning services. Moreover, minimizing tire pollution from automobiles has major health benefits for the public and climate benefits, removing harmful pollutants from the equation.

References

1. Climate Trade. (2023, May 11). The world's most polluting industries - ClimateTrade. Climate Trade. Retrieved November 8, 2023, from https://climatetrade.com/the-worlds-most-polluting-industries/
2. Domonoske, C. (2023, July 28). Biden administration proposes new fuel economy standards, with higher bar for trucks. NPR. Retrieved November 8, 2023, from https://www.npr.org/2023/07/28/1190799503/new-fuel-economy-standards-cars-trucks
3. Dow Electronic Components. (2023). Electronics Value Chain Solutions & Applications. Dow. Retrieved November 8, 2023, from https://www.dow.com/en-us/market/mkt-electronics.html
4. Dow Electronic Components. (2023, January January 13). Electronic Components. Dow. Retrieved November 8, 2023, from https://www.dow.com/en-us/market/mkt-mobility/sub-mobility-powertrain-performance/app-mobility-powertrain-elec-components.html
5. Gamage, C., Ramirez, K., Terry, J., Wilmoth, R., & Wright, L. (2023, July 14). US Businesses Need Low-Emissions Steel, and It's Time for US Steelmakers to Get It to Them. RMI. Retrieved November 8, 2023, from https://rmi.org/us-businesses-need-low-emissions-steel-and-its-time-for-us-steelmakers-to-get-it-to-them/
6. Self Financial Inc. (2023). Electric Cars vs Gas Cars Cost in Each State | Self Financial. Self Credit Builder. Retrieved November 8, 2023, from https://www.self.inc/info/electric-cars-vs-gas-cars-cost/
7. Shuster, R., & Threewitt, C. (2023, October 23). Can I Charge an EV with Renewable Energy? Car.USNews. Retrieved November 8, 2023, from https://cars.usnews.com/cars-trucks/advice/charge-ev-with-renewable-energy
8. United States Environmental Protection Agency. (2023, May 11). Smog, Soot, and Other Air Pollution from Transportation | US EPA. Environmental Protection Agency. Retrieved November 8, 2023, from https://www.epa.gov/transportation-air-pollution-and-climate-change/smog-soot-and-other-air-pollution-transportation
9. U.S. Department of Energy. (2023). Alternative Fuels Data Center: Michigan Laws and Incentives. Alternative Fuels Data Center. Retrieved November 8, 2023, from https://afdc.energy.gov/laws/all?state=MI
10. Wallace, A. (2022, June 23). Electric Vehicle Prices Rise As Raw Material Costs Double to $8K. Business Insider. Retrieved November 8, 2023, from https://www.businessinsider.com/cost-of-making-electric-cars-is-growing-manufacturers-hike-prices-2022-6

The Problems Behind Wastewater Management in Michigan

Brooke Liberto, Wyatt Rogoff, Maximilian Thompson, Ian Wilson, Isaac Davis

Executive Summary:

Michigan is the only state without a septic code. A recent estimate placed the number of failing septic systems within Michigan at the hundreds of thousands mark, which, according to Great Lakes Now, has sent raw sewage, containing E-Coli, into Michigan's groundwater and lakes. The Environmental Integrity Project (EIP) has found that 15,864 miles of rivers and streams within the state are polluted and deemed unfit for swimming. One potential solution would be the implementation of a state-wide septic system code, specifically following the framework laid out by House bills 4479 and 4480. A second option to address this issue would be to propose a subsidy to the Michigan Economic Development Corporation. To best address wastewater management issues, the state legislature should pass House bills 4479 and 4480, implementing septic codes and regulations in the state of Michigan.

Background:

Michigan's water management is a facet of government that affects the state at all levels; access to clean and fresh drinking water, swimmable lakes and rivers, and environmentally-friendly sewage systems are major impactors of both human and environmental well-being. Though water pollution affects the entire state of Michigan, statistics show that communities made up of predominantly Black and economically challenged citizens, like the Northside neighborhood of Kalamazoo, and the cities of Flint and Detroit, amongst others, are disproportionately affected by water pollution at all levels. We have found this to be a result, in most cases, of the close approximation between community members and industrial and service facilities, as well as the mismanagement of water sources and sewage systems at the state and local levels. The problem manifests in many forms; such as microplastics and chemicals in drinking water, as the nitrification of lakes and water sources, mismanaged sewage systems, amongst others. Many of the worst affected communities, as we have described, are low-income and majority Black, and do not have the economic resources to combat these environmental pressures. This is a problem that is currently hindering both the health of Michigan's wildlife and the people that make up this great state, and one that necessitates immediate action at both the local and state levels to facilitate lasting change.

One potential solution would be the implementation of a state-wide septic system code, specifically following the framework laid out by House bills 4479 and 4480. A second option to address this issue would be to propose a subsidy to the Michigan Economic Development Corporation. They would then assess the proposal and make recommendations to state government officials. It will then be voted on by lawmakers in the Michigan House and Senate. The state government would then work with private companies to subsidize the replacement of failing septic systems, which exist predominantly in communities with socioeconomic disparities. While this is an effective way to prevent water pollution, it is not a long term solution for the regulation of septic tanks throughout the entire state. Therefore, passing House bills 4479 and 4480 would be the most effective solution to this problem by implementing septic codes and regulations in the state of Michigan.

Policy Options

1. *Implementing Bills 4479 and 4480*

One potential solution would be the implementation of a state-wide septic system code, specifically following the framework laid out by House bills 4479 and 4480. Michigan is the only state lacking a standard for septic systems, forcing local ordinances to set their own requirements. However, these ordinances are often mismanaged, with only 13.3% of these ordinances requiring the inspection of septic systems when a property is sold. The House bills 4479 and 4480 effectively outline the standards for both the operation and installment of these septic systems, with the installment of a schedule for inspections, a database for inspections, professional standards for inspectors, as well as a committee designed to advise the Department of Environment, Great Lakes and Energy on wastewater treatment strategies. Currently caught in the committee on Natural Resources, Environment, Tourism, and Outdoor Recreation since April 27th of 2023, these bills hold the framework of a system integral to addressing the pressing issues of drinking & natural water source pollution.

2. *Subsidies for replacing failing septic systems*

Another solution entails the submission of a subsidy proposal to the Michigan Economic Development Corporation (MEDC), a state agency entrusted with driving economic growth across Michigan. Upon submission, the proposal undergoes a rigorous evaluation by the MEDC, focusing on its feasibility, anticipated impact, and alignment with broader state objectives, considering the potential public health and environmental benefits. Subsequently, the MEDC formulates recommendations derived from this assessment, which are then presented to state government officials, including department heads and the governor's office. The pivotal next step entails deliberation within Michigan's legislative bodies, the House and Senate, where lawmakers engage in a critical voting process. If the proposal secures legislative approval, it culminates in the authorization of the subsidy, allowing the state government to initiate collaborative efforts with private companies. This partnership aims to subsidize the replacement of failing septic systems, a substantial and necessary step toward improving living conditions and environmental quality within the communities most impacted by this issue.

Recommendation:

Of these proposed options, the best policy to address failures in wastewater management is the implementation of a state-wide septic system code, specifically following the framework laid out by House bills 4479 and 4480. When considering both options, a subsidy to the Michigan Economic Development Corporation would not be as effective.

To implement this subsidy, the MEDC would assess the proposal and make recommendations to state government officials. It will then be voted on by lawmakers in the Michigan House and Senate. The state government would then work with private companies to subsidize the replacement of failing septic systems, which exist predominantly in communities with socioeconomic disparities. While this is an effective way to prevent water pollution, it is not a long-term solution for the regulation of septic tanks throughout the entire state. Therefore, passing House bills 4479 and 4480 would be the most effective solution to this problem by implementing septic codes and regulations in the state of Michigan.

Acknowledgements

We would like to thank everyone for spending the time to become more informed about legislation regarding Wastewater Management in Michigan. We hope that this policy will shed light on a very pressing and important matter in sustainability and environmental issues.

References

1. Water, Michigan. "Septic Systems." MI Water Stewardship, 2023. https://miwaterstewardship.org/septic-systems/#:~:text=If%20not%20maintained%2C%20failing%20septic,money%20through%20avoided%20costly%20repairs.
2. "House Bill 6101." Michigan Legislature - Home. Accessed November 28, 2023. http://www.legislature.mi.gov/documents/2021-2022/billintroduced/House/htm/2022-HIB-6101.htm.
3. Neavling, Steve. "Communities of Color Are Dumping Grounds for Toxic Waste in Michigan." Detroit Metro Times, November 3, 2023. https://www.metrotimes.com/news/communities-of-color-are-dumping-grounds-for-toxic-waste-in-michigan-25351963.
4. Beecher, Janice. "Potential for Economic Regulation of Michigan's Water Sector." Michigan State University , November 8, 2018. https://ipu.msu.edu/wp-content/uploads/2018/12/Policy-Brief-for-the-Incoming-2019-Gubernatorial-Administration.pdf.

Climate Change in Detroit and its Impact on the African American Community

Ian Payne, Leah Zerwitz, Maanibha Sengupta, Natasha Shapiro

Executive Summary:

Regulations are essential in setting standards and preventing corporate exploitation of the environment, a problem that has led us to the current air quality crisis. These regulations can also be implemented relatively easily and won't have a large political stir. In a similar vein, we chose green industrial subsidies in tandem due to their potential to further shape and mold the private sector into a more environmentally beneficial enterprise. Further, the political attractiveness of subsidies, given their direct positive impact on job availability, is another benefit for policy optics. Some counter-arguments may suggest regulations can be hard on businesses, potentially hindering economic growth. However, subsidies serve to mitigate such impacts, turning a mandate into an incentivized opportunity. Critics might also argue that subsidies are a burden on taxpayers, but the environmental and public health benefits resulting from improved air quality and job creation in renewable energy sectors could outweigh these costs. The transformation to a cleaner, greener economy is both a necessary and beneficial transition for cities facing struggles like Detroit.

Background:

The most pressing environmental issues facing Detroit include poor air quality, flooding, and extreme heat. Much of the area's poor air quality can be traced back to Detroit's industrial economy. The Detroit-based industrial companies/factories are huge contributors to carbon emissions that harm the local air quality. A combination of aging infrastructure and increased rainfall has plagued Detroit residents and caused some of the worst flooding in the country. Finally, as global warming continues to heat up the planet, Detroit is simply unprepared. Many homes in Detroit lack air conditioning and neighborhoods lack tree canopies to provide shade and cool homes. At roughly 78%, Detroit's Black population is the highest of any city in the country. Large numbers of African Americans came to Detroit during the Great Migration to work in automobile factories. During the late 1940s, Detroit Mayor Albert Cobo halted public housing projects and instead supported urban renewal projects that destroyed Black neighborhoods. Between the 1960s-1980s, following a spur of uprisings, suburbanization dominated the white population. By the 1980s, Detroit went from a predominantly white city to a predominantly Black city. And, with few public housing projects and devastating urban renewal projects, many of the city's residents lived in poverty.

And, with few public housing projects and devastating urban renewal projects, many of the city's residents lived in poverty. The city's poverty was further exacerbated by the economic crash of 2008 that devastated the automotive industry. In 2013, the industry became the largest municipality to file for bankruptcy. With Detroit residents relying on automobile companies for employment, the economic crash pushed individuals and families already living in extreme poverty over the edge. Between 2011 and 2015, over 30% of all Detroit residences were foreclosed as a result of unpaid property taxes.

Policy Options

1. *Subsidies for shifting to green energy*

There are a range of potential policy options that can help to alleviate the impacts of climate change on Detroit and reduce racial inequities in the effects of climate change. One of the most consequential effects of climate change on Detroit residents is poor air quality, specifically as a result of pollution and factory emissions. One policy option that could reduce poor air quality is the promotion of subsidies for factories and industrial plants that commit to shifting to the adoption of green energy. This option could be implemented legislatively by enacting a bill that offers specific tax breaks to companies that agree to transition to the utilization of green energy. This proposal is relatively feasible as companies will likely be open to embracing greener energy if the subsidy incentives are compelling enough, but due to the politicization of climate change, politicians will likely vote against a bill like this. Though there are usually costs and benefits to the implementation of policy in general, this bill would benefit a wide range of Detroit communities–Detroit citizens who are currently impacted by the health consequences of pollution and poor air quality would clearly benefit from a bill like this, while the tax breaks that companies could be rewarded with could be used to foster new jobs and, in turn, bolster Detroit's economy. The benefits to the citizens of Detroit would be broad and wide-reaching, but because of the rates at which people of color tend to live near industrial plants and other factories, they would benefit even more from these potential tax breaks.

2. *Energy-efficient affordable housing*

Another policy option focuses on specifically targeting racial inequities in the impacts of climate change. This option involves the implementation of a policy that creates affordable, green, and energy-efficient housing in Detroit, especially focusing on low-income communities. An act that links the promotion of affordable housing, climate-resilient infrastructure, and energy-efficient standards is both feasible and has the potential to be enormously impactful. From a feasibility standpoint, though an act like this would be an initial economic investment, it would almost certainly pay off in the future. It would work to move citizens, especially those of color, away from areas with the heaviest levels of pollution, and also improve the sustainability of housing in Detroit, and reduce costs for utilities by setting environmental impact regulations for these new developments.

Recommendation:

For improving air quality, the optimal policy option would be a combination of regulations on industrial air pollution in the private sector and encouraging green energy through subsidies for green initiatives in factories and industrial plants. These actions directly target the primary sources of pollution and shift towards cleaner alternatives. Regulations on industrial air pollution would be effective in reducing harmful emissions because the industrial sector is one of the main contributors to air pollution. If ever wish to decarbonize the economy, it is crucial to tackle the main polluters right away.

However, to ensure these protections do not negatively affect the economy and optically damage the policy, subsidies for factories and industrial plants that commit to green energy would be beneficial for economic stimulus. These subsidies could temporarily offset costs for businesses associated with the transition to cleaner energy methods and incentivize the private sector to make this shift, promoting a cleaner environment and creating jobs, which would greatly benefit cities like Detroit. The factors that were most important in our selection of our policy options include their feasibility and potential effectiveness.

References

1. Caldwell, Noah, et al. "Detroit Homes Are Being Overwhelmed by Flooding - and It's Not Just Water Coming In." NPR, NPR, 23 Nov. 2021, www.npr.org/2021/11/23/1037540261/detroit-homes-are-being-overwhelmed-by-flooding-and-its-not-just-water-coming-in.
2. "City Snapshot: Detroit." Othering & Belonging Institute, https://belonging.berkeley.edu/city-snapshot-detroit Accessed 28 Nov. 2023.
3. "Detroit Air Quality Index (AQI) and Michigan Air Pollution." IQAir, www.iqair.com/us/usa/michigan/detroit. Accessed 28 Nov. 2023.
4. Ignaczak, Nina Misuraca, et al. "Staying Safe and Cool in a Detroit Heatwave." Planet Detroit, https://planetdetroit.org/2022/06/staying-safe-and-cool-in-a-detroit-heatwave/ Accessed 22 Feb. 2023.