



The Plastics Collaborative Policy Whitepaper on Single-Use Plastics

Executive Summary

Single-use plastics have profound negative costs on communities globally and in Southwestern Pennsylvania. These items never biodegrade in the environment, instead remaining as litter or breaking down into microplastics, with negative consequences on wildlife as well as human health and quality of life. Many of these items are not recyclable in any practical manner.

This whitepaper is the work of the Policy Working Group of the Plastics Collaborative, an initiative in the greater Pittsburgh region that includes over 30 cross-sector and diverse-minded organizations. The Plastics Collaborative Policy Working Group undertook a year of research on effective single-use plastic policies that included interviewing members of other communities around the United States. From this work, the Policy Working Group recommends three targets for policy initiatives to curb single-use plastics: Plastic Bags, Plastic Straws, and Polystyrene.

The Problem

Single-use plastic refers to plastic materials such as take out containers, straws, bottles and packaging that are meant to be used once and then become waste or litter. Once thought of as the height of convenience, the issues these materials have caused globally and in Southwestern Pennsylvania are expensive and increasingly harmful to the ecosystem, animals, and ourselves.

Unlike other waste, plastic will never truly break down. While something like a banana peel will biodegrade and return

to the earth, plastic waste merely breaks into smaller and smaller pieces known as microplastics. These microscopic fragments of plastics have been found globally in our food systems and even our own bodies. In a study conducted by PennEnvironment on the presence of plastic in Pennsylvania waterways, microplastics were found at every site they tested. These sites include places in our own backyard; the Allegheny, Monongahela, and Ohio rivers, as well as smaller bodies such as Chartiers, Turtle, and Sewickley creeks and Nine Mile Run in Allegheny County. Plastic was also found in the Youghiogheny River, Fayette County, and the Connoquenessing Creek, Beaver County.¹



¹Faran Savitz, "Microplastics in Pennsylvania a Survey of Waterways," Pennenvironment.org, March 2021, [PAGE], [https://pennenvironment.org/sites/environment/files/reports/PAE Microplastics Mar21 1.1.pdf](https://pennenvironment.org/sites/environment/files/reports/PAE%20Microplastics%20Mar21%201.1.pdf)

Microplastics are a detriment to our health and the environment, but the issue of plastics also comes at a cost. According to a report by Keep Pennsylvania Beautiful, it is estimated that the City of Pittsburgh pays over \$6.3 million annually to address the issues of litter and illegal dumping.² Another report on Pennsylvania litter conducted by PA DEP, PENNDOT, and Keep Pennsylvania Beautiful, found that cigarette butts and plastic were the top sources of litter found along Pennsylvania highways making up 37.1% and 30.4% respectively.³ Components of both sources will eventually break down to become microplastics.

Many would argue that single use plastics are recyclable and therefore should not



be banned or restricted, but the truth is a very small percentage of single use plastic items are captured and recycled. And when they are recycled, it rarely happens more than once, because recycled plastic does not have the physical properties that make it a viable raw material for plastic bottles, bags, and packaging. In fact of all plastics #1 thru #7 only bottles and jugs made out of #1 or #2 plastics have a reasonable expectation of getting recycled once if at all. All of the other types (#3 thru #7) and forms (clamshells, cups, plates, bags, etc. (including #1s and #2s of these forms) of single use plastic items are highly unlikely to be accepted or recycled even once.⁴

Top Pennsylvania Highway Litter Findings

37.1% Cigarette Butts

30.4% Plastic

² Burns McDonnell, "The Cost Of Litter & Illegal Dumping In Pennsylvania A Study Of Nine Cities Across The Commonwealth," KeepPAbeautiful.org, January 2020, [PAGE], <https://www.keppabeautiful.org/wp-content/uploads/2021/07/KPB-Litter-Cost-Study-013120.pdf>

³ Burns McDonnell, "Pennsylvania Litter Research Study," KeepPAbeautiful.org, January 2020, [PAGE], <https://www.keppabeautiful.org/wp-content/uploads/2021/07/Pennsylvania-Litter-Research-Study-Final-Report-1.30.2020.pdf>

⁴ Circular Claims Fall Flat: Comprehensive U.S. Survey of Plastics Recyclability (greenpeace.org)

A Collaborative Solution

The issue of plastics and microplastics in our system is one that impacts communities all over the world. Many of these communities, including major American cities, have already taken on the challenge to reduce single-use plastics. In the greater Pittsburgh region, a collaborative effort of over 30 cross-sector and diverse-minded organizations known as the Plastics Collaborative formed in 2020. This network identifies and takes action on opportunities to reduce single-use plastics in this area. Its work is centered around education, policy recommendations, and pilot projects via three respective working groups that have been meeting for the past year and a half.

→ Messaging Working Group

The Messaging Working Group's mission is to mobilize resources and campaigns which promote the advancement of member initiatives around reducing single-use plastic and the shared policy goals of the Collaborative. This group has created an internal plastics-themed newsletter, a toolkit resource for members to use as they begin speaking about the Collaborative and its work, and plan for an education campaign about single-use plastics in 2022.

→ Pilot Working Group

The Pilot Working Group's mission is to advance the outcomes and learnings of the Collaborative as a whole through actionable programming, the implementation of pilot programs that support a transition away from single use plastics and the organization of stakeholders in such programs. The group has generated ideas for pilot programs and discussed necessary considerations for a successful pilot. More concrete steps towards the planning and implementation of a pilot program have been taken since earlier in 2021 when COVID-19 vaccines were released to the public and smaller businesses and restaurants saw an upswing in business.

→ Policy Working Group

The Policy Working Group's mission is to research best practices around the country, identify actionable policy and legislation for the region, and garner legislative support. It has conducted interviews with experts and policy makers who have experience implementing legislation to address single-use plastics and held two panel discussion events that allowed members of the Collaborative to hear from these national experts and policy makers. Through collaborative discussions between representatives from local government, environmental groups, retailers, and restaurants in the region, the Policy Working Group has compiled the list of policy solutions that this paper explores.



Policy Working Group Interviews

The initial action taken by the Policy Working Group was to complete a series of interviews with governmental representatives and experts around the country who had experience in implementing single-use plastic reduction policies. These interviews were conducted in the Summer and Fall of 2020. From these interviews two events were held. The first of these, held in August of 2020, was a panel event featuring speakers from Cuyahoga County to discuss their county bag ban. The second event was held in November of 2020 and featured panelists from all over the country discussing their experiences.

Interview 1 | Cuyahoga County, Ohio

Interviewed Sunny Simon, County Councilperson, Mike Foley, Director, Department of Sustainability, and others

Policy: Plastic Bag Ban

Description: Ban of single-use plastic bags at retail establishments not including restaurants. Paper bags made from a minimum of 40% recycled content are listed as the replacement for plastic bags, there is no fee associated with paper bags.

Major Takeaways:

- Larger and national retailers are becoming accustomed to single-use plastic reduction policies such as bag bans. If proper measures are taken and relationships are formed, these businesses can become allies. In the case of Cuyahoga County, grocery chain Giant Eagle became that ally.
- Plastic bag bans create a higher demand for alternatives, mainly paper bags. This can cause a shortage of paper bags if not properly prepared.
- Single-use plastic reduction policies should be coupled with a robust communications plan to inform citizens of the new policy, ensure they are prepared and educate them on the importance of the changes being made.
- Stakeholder engagement prior to legislation proposal is key to ensuring a comprehensive and well supported policy.



Interview 2 | Chicago, Illinois

Interviewed Iyana Simba, Clean Water Policy Director, Illinois Environmental Council

Policy: Shopping and Take Out Bag Fee

Description: City-wide seven cent fee on single use plastic and paper bags at retail establishments. The fee is split between the business (two cents) and the government (five cents).

Major Takeaways:

- Use specific language in the writing of legislation to ensure there are no existing loopholes.
- Offer fee waiver options for vulnerable groups for an equitable policy.
- Complete extended background research and outreach to potentially affected businesses, organizations, and individuals prior to proposing legislation.
- A fee split between business and government helps create a compromise. It lowers costs for businesses, and funds enforcement and special governmental projects.
- Build a coalition of cross-sector entities prior to releasing legislation to garner support.
- Address opposition and hear their grievances. Take the feedback given into consideration as legislation is created to ensure a robust policy that is well supported.



Policy: Styrofoam Ban

Description: A proposed city-wide ban on polystyrene used in cups, take out containers, and other similar products.

Major Takeaways:

- This policy was largely opposed by members of the Styrofoam recycling industry in the area claiming that polystyrene was a recyclable material. Opposition also cited the impact on small businesses that this ban would have. Unfortunately, opposition stopped this legislation.



Interview 3 | Portland, Maine

Interviewed Troy Moon, Sustainability Coordinator, City Manager's Office

Policy: Shopping and Take Out Bag Fee

Description: Municipal-level five cent fee on plastic and paper bags at retailers that sell food. All proceeds go directly to the business.

Major Takeaways:

- Engage stakeholders from multiple affected industries to ensure support during policy creation and roll-out.
- Implementing an enforcement by public complaint strategy keeps enforcement efforts and costs low.
- In outreach to retailers who might be affected, provide a toolkit for affected businesses. This will allow them to more easily begin implementing the policy.



Policy: Bottle Deposit

Description: Offers a fifteen cent refundable deposit on wine and spirits containers and a five cent refundable deposit on beer, hard cider, wine coolers, soda, or noncarbonated water beverage containers, and alcoholic or noncarbonated drinks sold in the state.

Major Takeaways:

- This policy is effective in reducing litter and cleaning up the waste stream.
- Ensure robust communication strategies that offer information on how the materials are collected and where you want them to go.
- While one of the most effective policy options, it would also be one of the most difficult to get passed and implemented, since it would require state legislative action.



Policy Working Group Recommendations

The following recommendations were originally included in a memo written in winter of 2021. The memo discussed lessons learned from the interviews described above.

→ Preparation

- Focus on engaging stakeholders, have conversations and build coalitions around any proposed legislation.
- Provide infrastructure around release of legislation, disseminate tool kits and have programs in place for a smooth transition for businesses and organizations.

→ Legislation

- Implementing fees rather than bans may be easier on small businesses and those that may have additional uses for single-use plastic items (ie. reusing plastic bags for trash liners or waste)
- Ensure legislation takes equity into consideration and makes necessary provisions to protect under-resourced, overburdened populations from negative impacts.
- Enforcement should focus on incentives; include clearly written penalties only as a last resort.

→ Content

- Extend legislation to include not only retail bags, but also Styrofoam and produce bags.
- Require permitted alternative materials to contain a certain level of recycled material.
- Include provisions that allow the policy to remain relevant through time (Ex: A mechanism that increases a fee in a set number of years to properly reflect inflation levels.)

→ Other Considerations

- Renewal of Pennsylvania’s Plastic-Bag Preemption Law (the “Ban on Bans”)
- How the COVID-19 pandemic has impacted businesses and their ability to adapt to new policies.
- Equity concerns
- “Biodegradable,” “degradable,” or “compostable” bags are often just as harmful as standard single-use plastic bags when they end up in our environment.



Recommended Policies

Once general research had been completed on single-use plastic legislation, the Policy Working Group meetings began evaluating several potential policies and their feasibility in the Southwest PA region. The group ultimately decided to pursue further research into reduction policies for plastic bags, polystyrene food service containers, and straws. The following policy recommendations would create progress, but should act as a stepping stone to further initiatives to reduce the use of single-use plastic in the region.

Plastic Bags

Recommendations

- Consider a ban on thin plastic film bags with the following joint action:
- **Levy a fee** on available disposable bags of at least 12 cents (study recommended 10 cents adjusted for inflation).
- **Impose guidelines** on available disposable bags to address their environmental footprint. For example, require bags to be composed of a certain amount of recyclable material.
- **Work to improve infrastructure** to recycle available disposable bags.
- **Address unintended consequences** of plastic bag bans such as alternatives people will turn to for secondary use such as trash bags composed of even more plastics.
- **Consider and create a plan** to combat the higher demand for paper and other sorts of disposable bags which will also have an impact on the environment and mitigate the increased burden on vulnerable populations.
- **Include a messaging plan** to encourage habitual use of reusable bags to meet and exceed their threshold of environmental benefit.



Background

The thin plastic bags that you get from the grocery store and other retailers are made of what is commonly known as plastic film. This is a thin plastic material that is typically not recyclable in your curbside bin because it clogs recycling machinery costing time and money. Because of its wide availability, film represents a majority of litter (per number of items) found in Pennsylvania.⁵ Unfortunately, once littered, film can get swept in the water treatment system which causes blockages and costs taxpayers money.

In our region, Pittsburgh City Councilperson Erika Strassburger released a resolution in May 2021 announcing the intent to introduce plastic bag legislation to address issues stemming from plastic film.⁶ The ordinance was introduced in November 2021, and in April 2022, Council passed a bill that both bans single-use plastic shopping bags at retail establishments and levies a fee of 10 cents for each paper bag used. Plastic causes significant health and environmental issues, but the solution to this issue is a point of contention among policy makers. The two policies most implemented to reduce the use of plastic bags are bans and fees. Both come with their own considerations but are shown to be equally impactful on the use of disposable bags.⁷

Banning plastic bags is a quick way to eliminate the material and tends to be cheaper to implement and enforce.⁸ Bans have also shown 6% less disposable bag use in grocery stores than fees.⁹ However, these policies alone see an increase in demand for paper bags which hold their own environmental impact including higher levels of energy and water to manufacture than plastic, but the increase in demand significantly lessens with higher fees on paper bags (5 cents vs. 10 cents according to one study).¹⁰ Requiring available paper bags to be made of higher levels of recyclable material may also help to offset paper bags' environmental impact.¹¹

Additional considerations while banning plastic shopping bags include their alternate uses as things such as trash liners or pet waste disposal bags and what people will turn to if the bags are eliminated. Studies have found that in places where plastic shopping bags are banned, the demand for small garbage bags increased by 120%.¹² While bans on plastic shopping bags still see a net decrease in plastic use, the use of thicker plastic garbage bags as an alternative offsets that benefit by 30%.¹³ Levying a fee rather than a ban has the potential to encourage consumers to bring reusable bags, but gives them the opportunity to purchase only the plastic bags that

they intend to reuse. Combining a fee with a ban can balance these secondary impacts.

The final consideration while implementing policy to reduce plastic grocery bag use is the number of uses it takes for cotton and plastic reusable bags to have a positive environmental impact. A UK study found that cotton reusable bags need to be used 131 times, which translates to over two years of weekly use, before they begin to have an environmental benefit.¹⁴ Essentially, while reusable bags are the best option, they will not have a positive impact unless consumer habits change as well. Ensuring that any plastic bag legislation is coupled with messaging to encourage habit change towards reuse is essential in legislation producing environmental benefits.

⁵ Burns McDonnell, "Pennsylvania Litter Research Study," KeepPABeautiful.org, January 2020, [PAGE], <https://www.keppabeautiful.org/wp-content/uploads/2021/07/Pennsylvania-Litter-Research-Study-Final-Report-1.30.2020.pdf>

⁶ <https://pittsburgh.legistar.com/LegislationDetail.aspx?ID=4935509&GUID=738F5A2E-616D-4DDE-8461-7AB264269BAE&Options=&Search=>

⁷ Rebecca L. Taylor and Sofia B. Villas-Boas, "Bans vs. Fees: Disposable Carryout Bag Policies and Bag Usage," *Applied Economic Perspectives and Policy* 38, no. 2 (2015): [PAGE], doi:10.1093/aep/pvp025)

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ STANFORD Magazine, "Paper, Plastic or Reusable?" STANFORD Magazine, [PAGE], accessed September 08, 2021, https://stanfordmag.org/contents/paper-plastic-or-reusable?utm_source=npr_newsletter&utm_medium=email&utm_content=20190408&utm_campaign=money&utm_term=nprnews

¹² Rebecca Taylor, "Plastic Bag Bans Can Backfire If Consumers Just Use Other Plastics Instead," Associated Press, March 17, 2019, [PAGE], https://apnews.com/article/85f82130fa0b272485d335153bed862f?utm_source=npr_newsletter&utm_medium=email&utm_content=20190408&utm_campaign=money&utm_term=nprnews

¹³ Ibid.

¹⁴ Rebecca Taylor, "Plastic Bag Bans Can Backfire If Consumers Just Use Other Plastics Instead," Associated Press, March 17, 2019, [PAGE], https://apnews.com/article/85f82130fa0b272485d335153bed862f?utm_source=npr_newsletter&utm_medium=email&utm_content=20190408&utm_campaign=money&utm_term=nprnews

Straw Ban

Recommendations

- **Implement a policy** that bans the use of plastic straws, cutlery and utensils and makes the alternative option request only
- **Include equity and accessibility exemptions** in plastic straw legislation and ensure that appropriate partners are brought to the table to discuss the policy through an equitable lens.
- **Incorporate public environmental education** on the importance of lowering plastic use and more specifically plastic straw use to ensure efficacy.
- **Include other materials that can be regulated** in the same manner as plastic straws such as plastic cutlery and other plastic utensils in legislation to increase impact.



Background

The anti-plastic straw movement got its legs following the shocking 2015 YouTube video depicting a sea turtle with a straw stuck in its nose.¹⁵ The video went viral on social media and the national crusade against plastic straws began. Companies such as Starbucks began decreasing their straw usage as a result and throughout the years several counties and municipalities throughout the United States have enacted legislation to decrease plastic straw usage.¹⁶ Critics of these policies cite the small percentage of plastic waste that straws account for (approximately .8% of all litter found in Pennsylvania roadways according to the Pennsylvania Litter Research Study) as well as equity and accessibility issues with bans enacted without exemptions.

A recent study on straw related legislation across the Americas outlined the characteristics of existing policies.¹⁷ Firstly, the policies either directly ban straws, indirectly ban them through regulation of materials or other components, require retailers to only offer straws upon request, or a combination of these. Some of the policies include exceptions to the ban based on accessibility, specifications for adjoining environmental education initiatives, and the use of economic instruments to deter the use of plastic straws.¹⁸ The study found that the majority of US and Canadian policies directly ban plastic straws (65%), 52% of policies require straws to only be provided upon request, 26% require available straws to be comprised of degradable material,

53% make accessibility exemptions, and 28% require environmental education initiatives.

Places like Seattle, New York City and several cities have enacted bans on plastic straws, but less usual suspects have also made moves to reduce plastic straw use. West Lafayette, Indiana resolved in early 2019 to reduce not only plastic straws but also plastic utensils, and other single-use food service-related plastics.¹⁹ In Milwaukee, Wisconsin, strict measures were taken against straws in early 2020. The ordinance prevents Milwaukee restaurants from the automatic distribution of plastic straws instead requiring those who may need a straw to request one thus addressing any equity concerns. The ordinance exempts restaurants that serve items where paper straws are less effective such as smoothie restaurants. This strategy is likely to have lessened the amount of pushback received from businesses during the passage of legislation.²⁰

The Southwest PA region can glean some important messages from the studies of legislation that exist around plastic straw legislation. Firstly when creating legislation, including equity and accessibility exemptions is one of the major keys to success. Ensuring that conversations are had with appropriate groups including disability advocates is an important strategy that will allow any policy to be as equitable and inclusive as possible. Next, incorporating a level of public education along with policies to reduce plastic straws will aid in the

overall habit change of the public and bring a higher level of success.

Additionally, when considering the case studies of Indiana and Wisconsin we note that West Lafayette, Indiana's resolution encourages the reduction of plastic straws, but also plastic cutlery and other utensils. Compiling all these materials into one policy will help increase the impact of the legislation. Materials that have similar uses can be regulated similarly in one piece of legislation and prove to be a more efficient and impactful strategy.

Milwaukee, Wisconsin's plastic straw ordinance could be a good model for our region as it reduces plastic straw usage while making considerations for those who need to use one. To take their ordinance a step further, policymakers could ban all plastic straws and make alternatives available by request only. Milwaukee's promotion of paper straws as the main alternative should be carefully considered, as paper straws pose their own set of environmental issues. Firstly, the straw shape in any material still has the potential to impact wildlife in the same way as plastic straws. Paper straws and other alternatives also take more energy to produce. Research should be completed to determine the most sustainable option. Provisions also need to be made to ensure that any straw alternative (i.e. compostable straws) can be disposed of properly.

¹⁵ YouTube, August 10, 2015, [PAGE], accessed September 09, 2021, <https://www.youtube.com/watch?v=4wH878t78bw>

¹⁶ Arnaldo Mailes Neto et al., "An Overview of Plastic Straw Policies in the Americas," *Marine Pollution Bulletin* 172 (2021): [PAGE], doi:10.1016/j.marpolbul.2021.112813

¹⁷ Arnaldo Mailes Neto et al., "An Overview of Plastic Straw Policies in the Americas," *Marine Pollution Bulletin* 172 (2021): [PAGE], doi:10.1016/j.marpolbul.2021.112813

¹⁸ Ibid.

¹⁹ Dave Bangert, "Plastic Straw Ban? Not Quite, as West Lafayette Pushes Restaurants to Cut Back," *Journal and Courier*, February 05, 2019, [PAGE], accessed September 10, 2021, <https://www.jconline.com/story/news/2019/02/04/plastic-straw-ban-not-quite-west-lafayette-pushes-restaurants-cut-back/2765240002/>

²⁰ Jeramey Jannene, "City Hall: Plastic Straw Ban Went Into Effect, Did Anyone Notice?" *Urban Milwaukee*, [PAGE], accessed September 10, 2021, <https://urbanmilwaukee.com/2020/04/15/city-hall-plastic-straw-ban-went-into-effect-did-anyone-notice/>

Polystyrene Ban

Recommendations

- **Implement a ban on expanded polystyrene** at restaurants, retailers and grocery stores that prohibits the distribution of EPS packaging and food service ware as well as single-use EPS coolers, and other single-use plastic food service utensils such as straws, cutlery and more.
- **Include an instrument** that gives businesses time and, in necessary cases, funds to acclimate to the ban, paying close attention to the needs of small businesses.
- **Implement a strong enforcement plan** to ensure success of the policy.



Background

Polystyrene is a material with a wide range of uses. It is frequently used in construction and manufacturing and is present in appliances, cars, electronics and packaging. Its well-known foam form is called expanded polystyrene (EPS) or extruded polystyrene (XPS).²¹ Like all plastics, the material is not degradable; instead over time it breaks down into smaller and smaller pieces which causes problems for animal and marine life. Its use in the food service industry accelerated because of the material's lightweight, durable and waterproof nature, its insulating properties, and low price.

A report done by the Plastics Foodservice Packaging Group funded by the American Chemistry Council for the FDA in 2013 maintains that polystyrene is safe for use in food service. According to the study, the average person only ingests 6.6 micrograms of polystyrene per day, well below the FDA limit of 90,000 micrograms.²² However, critics of expanded polystyrene argue that the material exposes humans to styrene, a chemical which has been linked to many health issues including cancer.²³ Critics of EPS also note the material's propensity to become litter (EPS makes up 3.5% of all litter in Pennsylvania according to Keep PA Beautiful's Litter Research Study).²⁴ EPS also is not viable to recycle in most curbside programs. As of December 2019, 249 local level bans had been enacted in 20 states²⁵ and to date, 6 states have in place, or plan to have in place, a

statewide ban of some combination of polystyrene products.²⁶ As of 2019, all of the policies in place to limit use of EPS were bans of some variety, the majority of which (65.9%) were narrow bans that only applied to retailers that sell food.²⁷ Other types of bans include partial bans (8.8%) that only apply to certain places or events such as government buildings and festivals; full bans (9.6%) which ban EPS use for packaging at retailers and also grocery stores; and expanded bans (15.7%) which extends the ban to foam coolers as well as other single-use plastic items such as straws. Commonalities of all these policies include a phase-in approach to allow businesses to get rid of their current EPS stock and prepare for the policy and an "economic hardship provision" which gives a limited time exemption to businesses if switching to alternative products has a negative economic effect on the business.

Of the list of localities that have enacted polystyrene bans, perhaps that most similar to our region is Minneapolis who in 2015 enacted a narrow-type ban of polystyrene containers. The narrow ban mainly impacts the distribution of polystyrene containers at restaurants and retailers who sell food and levies an "administrative fee" (less than a fine) to any violators of the law. The city first passed a ban in 1989 that called for the ban of polystyrene containers, but lack of enforcement proved the legislation ineffective. The updated legislation of 2015 stepped up enforcement and

hoped to make a larger impact.²⁸ According to Minneapolis Councilman Andrew Johnson, who wrote the polystyrene bill, the legislation has been successful in waste reduction and in reduction of contaminants in the recycling system.

While there aren't many current case studies of polystyrene bans that make a perfect model for our region (legislation is mostly enacted in historically democratically held states, coastal towns where plastic legislation is common or both) they can still help us strategize for best practices in our region. As all other policies in the U.S. regarding EPS implement some level of ban and have been successful, it follows that our region would do the same. The question, however, is what type of ban would be most effective here. Narrow bans that only prohibit the distribution of EPS at restaurants and food retailers are the most common, but based on the other recommendations in this paper regarding the ban of straws and other plastic utensils, an expanded ban (the second most common) may be a more efficient option as proposed legislation. Any proposed legislation should include the existence of policy instruments that allow time for businesses to acclimate to changes regarding polystyrene use. This will lead to both a more supported and more successful policy. Lastly, strong enforcement mechanisms and careful language need to be included in the legislation to ensure success.

²¹ "What Is Polystyrene?: Uses, Benefits, and Safety Facts," ChemicalSafetyFacts.org, May 25, 2021, [PAGE], <https://www.chemicalsafetyfacts.org/polystyrene/>

²² "What Is Polystyrene?: Uses, Benefits, and Safety Facts," ChemicalSafetyFacts.org, May 25, 2021, [PAGE], <https://www.chemicalsafetyfacts.org/polystyrene/>

²³ "Polystyrene Fact Sheet: 8 Reasons to Ban Styrofoam," Green Dining Alliance, October 23, 2015, [PAGE], <https://greendiningalliance.org/2015/10/8-reasons-to-ban-styrofoam/>

²⁴ Burns McDonnell, "Pennsylvania Litter Research Study," KeepPABeautiful.org, January 2020, [PAGE], <https://www.keeppabeautiful.org/wp-content/uploads/2021/07/Pennsylvania-Litter-Research-Study-Final-Report-1.30.2020.pdf>

²⁵ Travis P. Wagner, "Policy Instruments To Reduce Consumption Of Expanded Polystyrene Food Service Ware In The Usa," Volume 09 - March 2020 Detritus, no. 9 (2020): [PAGE], doi:10.31025/2611-4135/2020.13903

²⁶ Rachel Jenkins, "Plastic and Styrofoam Bans," WebstaurantStore, April 18, 2021, [PAGE], accessed September 15, 2021, <https://www.webstaurantstore.com/blog/2436/styrofoam-bans.html>

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²⁸ Bill MCAULIFFE and Catherine Preus, "Minneapolis City Council Passes Ban on Polystyrene Packaging," Star Tribune, May 24, 2014, [PAGE], <https://www.startribune.com/minneapolis-city-council-passes-ban-on-polystyrene-packaging/260490541/>



Who can help foster this?

For the policies recommended to be enacted they need champions. Networks like the Plastics Collaborative, with cross-sector involvement, can play a major role in turning these policies into law. Advocacy organizations and non-profits can use their voices to promote policy to their already-active audiences and can apply for funding for related projects.

Government entities can champion policies like these and begin the processes to turn these recommendations into law. Small and large retailers and businesses can provide support to these policies and help to bring their peers on board who may have some reservations. Every type of business or organization has an important role to play if there is hope in reducing the region's single-use plastics.

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ABOUT

The Plastics Collaborative is a network of organizations that identifies and takes action on opportunities to reduce single-use plastics in the greater Pittsburgh region. It comprises diverse-minded and cross-sector organizations in southwestern PA including representatives from community groups, nonprofits, businesses, and local governments. The work of the Collaborative is centered around education, policy recommendations, and pilot projects, with working groups established for each topic. Engagement in the Plastics Collaborative does not convey an organization's endorsement of specific statements or activities produced by the Collaborative.

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