## **Legislative Budget and Finance Committee**

## A Study in Response to Act 2019-20: Non-Economic Impacts of Single-Use Container Bans/Fees

## **Report Comments by Stephen Fickes, Project Manager**

## June 30, 2020

Good morning. Mr. Chairman and members of the Committee, it is a pleasure to be here this morning to discuss the results of our study, which was mandated by last year's revisions to the Fiscal Code through Act 2019-20. Before I review our study's results, it is necessary to provide some context about the study, its findings, and the events of the past several months.

First, a bit of historical perspective to this study's origins. In June 2019, an amendment to the Fiscal Code, required a two-pronged approach to study the issue of regulating single-use plastics. The approach was two-pronged because our sister legislative service agency, the Independent Fiscal Office (IFO), was tasked with one aspect, an "economic impact analysis to the Commonwealth, industry partners, and consumers for any regulation impacting single-use plastics, reusable plastics, auxiliary containers, wrappings, or polystyrene containers." Concurrently, we were tasked with Act 2019-20's second prong, which was conducting an "environmental impact and any impact" of regulations covering the same materials.

Obviously, an "environmental impact and any impact" study on potentially tens of thousands of different plastic products and plastic-related products is a rather broad mandate. Consequently, it was necessary to reframe the mandate into workable study objectives. We began with a preliminary survey phase, during which we performed research and analysis to better understand the issues. Preliminary survey also allows us to develop the workable objectives necessary to guide the study, as well as to identify any unique methodology or scope limitations.

From our preliminary survey phase, an important issue that resonated among policymakers was the impact of bans and/or fees on single-use containers, whether made of plastic, Styrofoam, or other materials. Plastics bans/fees are typically imposed by municipalities on residents or retailers, although some states have also enacted similar bans/fees. More specific to single-use containers and our preliminary research, thin plastic bags, which are typically provided to customers in retail locations, are frequently targeted for these types of bans/fees.

Accordingly, to best meet Act 2019-20's mandate, and with the Committee officers' concurrence, we set our study's objectives, as follow: to provide appropriate background and context to the issues surrounding the implementation of bans and fees on single-use containers, whether at the state or municipal level; to determine consideration given by Pennsylvania municipalities to impose bans or fees on single-use containers; and finally, to review the non-economic and possible unintended consequences of imposing bans or fees on plastic products, which includes bags, containers, straws, or other similar single-use products. The report we are presenting today is centered on these three objectives.

As we progressed with our analysis, it was quickly apparent that we were tasked with conducting a still loosely-defined study on a rather expansive subject. For example, under the definitions a wide array of possible products and containers could be analyzed, including, but not limited to, bags, straws, wrappings, containers, packaging supplies, bottles, cups, and cartons. Moreover, these products are made from varying materials, but include specifically, plastics, recycled plastics, and polystyrene. Furthermore, because the term "environmental impact and any impact" is a non-specific and potentially unlimited descriptor for conducting our study, it was necessary for us to limit the scope of our review.

For that reason, we limited the scope of this report to single-use plastic bags, and specifically of the type that are commonly used in retail settings. Our decision was driven by the fact that when evaluating the environmental impact of plastics, most attention is directed toward these type of "single-use" containers. This limitation does not imply that other plastic items (e.g., plastic straws) are not a potential issue, but rather in our research leading up to the formation of our objectives, the environmental impact from single-use plastic bag usage had been at the forefront of consideration for most state and local governments. Further, it is important to reiterate that because of the two-pronged approach outlined by Act 2019-20, we did not attempt to assign any dollar-value or multipliers to the potential environmental impacts of using (or regulating the use of) single-use plastic bags. The IFO held that responsibility, and their analysis will be released later today, if not already.

I also want to highlight two other important aspects. First, the unprecedented impact caused by the COVID-19 pandemic. As I'll discuss later, most of our analysis on municipal opinions about single-use plastic regulation was conducted prior to the COVID-19 pandemic; consequently, we are unable to evaluate whether those same thoughts and opinions would still exist today. Secondly, as a result of further amendments to the Fiscal Code from Act 2020-23, the current state preemption which prohibits municipalities from enacting regulations or ordinances on single-use plastics, and which was set to expire on July 1, 2020, has been extended through July 1, 2021, or six months after the end of the Governor's disaster declaration related to the COVID-19 pandemic, whichever is later. With this background and context in place, I'll move to a discussion of our findings and conclusions.

We took inventory of existing regulations used by states and local governments over single-use plastics. From this inventory, we identified three types of regulatory structures: bans, which are a straight-forward prohibition from retailers or consumers using single-use bags; fees, which allow single-use plastic bags,

but require retailers to charge a fee for the bags; and hybrid approaches that combine a ban and a fee.

For example, retailers are banned from providing single-use plastic bags, and charge a fee for using any type of single-use bag, including paper. This ban/fee approach is the more common regulatory structure, and according to proponents of bag bans, the more effective approach.

In Pennsylvania, there is only one municipality that has a plastic bag prohibition. That municipality, Narberth Borough, is a small municipality with a population of about 4,000, located in Montgomery County. Narberth has a fee-type structure, which requires retailers in the municipality to charge a 10-cent fee per plastic bag, and retailers retain the fee. Narberth instituted its local ordinance before last year's statewide preemption was enacted. Two other municipalities, the City of Philadelphia, and West Chester Borough, had created local ordinances prohibiting plastic bags; however, because of the aforementioned continuation of the state preemption, those regulations cannot proceed. However, the Mayor of Philadelphia had already indicated that the City's proposed ban was no longer realistic and was already delaying implementation due to the pandemic.

To further gauge Pennsylvania's municipal leaders and interest in and initiatives for single-use plastic regulations, we surveyed the 2,560 municipalities listed in the Department of Community and Economic Development's local government database. We had a 39 percent response rate to our survey, which is quite good. The survey revealed that municipal leaders lack consensus on whether bans and/or fees on single-use plastics were an effective way of minimizing harmful environmental impacts. According to our results, respondents were evenly split on the issue: 39.1 percent of municipal leaders believe that bans/fees on single-use plastics <u>are</u> an effective way of minimizing harmful environmental impacts, and 39.6 percent believe that bans/fees <u>are not effective</u>.

Interestingly, 69 percent of those surveyed felt it should be the state government's responsibility to impose any mechanism(s) to reduce the use of single-use plastics. We think this may be an indicator that municipal leaders would like to see more consistency in the approach to the issue. Respondents also indicated that the most effective way to limit the use of single-use plastic is by placing an outright ban (27 percent) as opposed to placing a fee on consumers (7 percent). Additionally, 22 percent of municipal leaders who responded to our survey reported that an imposition of a fee on suppliers is also an effective way to limit single-use plastic. Nevertheless, when asked to rank the importance of regulation on single-use plastics in their community, respondents did not rate it is a very important issue. Most respondents viewed the issue as "not important," and the fewest respondents rated it as "very important."

Moving on to our final objective, we sought to investigate what some of the "unintended consequences" are when implementing bans/fees on single-use plastics. An unintended consequence is a social science term used to describe unforeseen events from trying to "fix" one problem, only to have the solution then create another ancillary issue or worsen the present condition. Our report is not a sociological analysis of single-use plastic bag regulations; however, we do present at least three possible unintended consequences that may result. First, there are sanitary concerns if single-use plastic bags are banned. Based on research we reviewed and an expert with whom we consulted, reusable grocery bags (RGBs), which are often used as an alternative to single-use plastic bags, can be a transmission pathway for bacteria and viruses to other shoppers and store employees. To this point, with the recent COVID-19 pandemic, many retailers are now banning customers from bringing RGBs into grocery stores. Further, research shows that RGBs are not used enough times to offset the associated environmental impacts. Consequently, at a time when Pennsylvania is dealing with a pandemic and encouraging citizens to exercise social distance protocols and other hygienic practices, a negative public health consequence may result from having residents rely upon RGBs, if single-use plastic bags are banned.

Second, we found that while RGBs and single-use plastic bags have environmental impacts, those impacts are substantially <u>less</u> than the impacts from alternatives like paper bags. We reviewed several peer-reviewed studies, including a detailed life-cycle assessment from Clemson University and found that because of the increased water consumption used in manufacturing paper bags, the overall environmental impacts are actually greater from paper bags than single-use plastic bags. Consequently, an unintended consequence may result if plastic bags are completely banned and consumers erroneously switch to paper bags believing them to be an eco-friendlier alternative. In this scenario, more environmental damage may result through the increased use of paper bags.

We also found that the notion of a plastic bag being just "single-use" for conveyance of purchased items from store-to-home is a misnomer. Single-use plastic bags have many other uses including as pet waste receptacles, trash cash liners, and for packing wet items. If single-use plastic bags are no longer available, unintended consequences can result by forcing consumers to purchase additional bags for these purposes or using other bags which have greater environmental impacts. To this point, we reviewed a life-cycle assessment of plastic bags and found that even the reuse of a single-use plastic bag one-time had significant benefits over other carrier bags, which required multiple reuses. As an example, cotton carrier bags needed to be used as many as 7,100 times to reduce the environmental impacts to that of a single-use plastic bag.

Another frequently cited reason for banning single-use plastic bags is that the bags become litter and foul waterways. There is no question that litter is unsightly and presents challenges for the Commonwealth. Litter cleanup is an added expense for local and state governments, and it impacts citizen enjoyment of the outdoors. However, based on litter surveys conducted of Pennsylvania's roadways and waterways, while plastic <u>is</u> a significant litter source overall, single-use plastic bags specifically, are not the primary

source of litter. Overwhelmingly, cigarette butts, which contain plastic, are the main source of litter in Pennsylvania. According to a recent litter survey conducted in partnership with the Departments of Environmental Protection and Transportation, single-use plastic bags constituted 0.7 percent of all collected litter in 2019. Consequently, while a goal of reduced litter is important, banning single-use plastic bags may not provide the results that were intended by such a ban.

In conclusion, because the mandate within Act 2019-20 was informational and did not ask us to present recommendations for future action, we make no recommendations on the regulation of single-use plastics in the Commonwealth. Nevertheless it is important to highlight that whether bans and fees on single-use plastic are effective depends upon perspective and desired outcome. If the goal is to change human behavior and use, then bans and fees can be effective. However, in Pennsylvania and elsewhere, these actions are not without cost and possible unintended consequences. The fact that many states and local governments have decided to suspend single-use plastic bans/fees during the COVID-19 pandemic due to concerns about the safety of RGBs is proof of the unintended consequences of such regulation. This is not to say that single-use plastic is not a looming issue, but rather the perception of the problem and the impact of suitable and feasible remedies need to be carefully balanced. To this point, Pennsylvania continues to emerge from the effects of the COVID-19 pandemic, and as such the pause of any further restriction on single-use plastic until the state is on more steady footing should result in more informed decision-making that may avoid unintended consequences as have occurred in other jurisdictions.

Finally, I would I like to thank Amy Hockenberry and Joseph Asare, analysts with our staff, who helped to gather information and analysis for this report. At this time, I would be happy to answer any questions you may have.