

Austin's Plastic Bag Ban a Colossal Failure!

IDEALISTIC AND UTOPIAN MINDSET BLINDED CITY COUNCIL FROM PREDICTING BAG BAN FAILURE!

GOOD SOLUTIONS DO NOT NEED TO BE MANDATED; ONLY BAD ONES, DO!

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October 12, 2015

Introduction

In June 2015, the Austin Resource Recovery Service released a candid report entitled "[Environmental Effects of the Single Use Bag Ordinance in Austin, Texas](#)" questioning the effectiveness of the city's own bag ban. The report noted that the ordinance reduced litter from "single-use" or "lightweight" plastic carryout bags, but that the unintended consequence was an increase in the use of 4-mil reusable plastic shopping bags (disposed of after just a single-use), and the increased cost to consumers and retailers. (Waters, 2015, p. 28) Here is what some others have said after reading the report:

Corey Olson of [iHeartMedia](#) stated:

"... A new audit commissioned by the city shows the ban is not really working. The prohibition on single-use plastic bags was aimed at reducing their presence in landfills, but the audit finds that people are now throwing away reusable plastic bags at a higher rate." (Olson, 2015)

Emily Richards, of [CNS News](#) stated:

"... A recent review concludes that Austin's bag ban has backfired, creating more negative effects on the environment than the plastic bags it outlawed." (Richards, 2015)

Adam Minter in [Bloomberg View](#) stated:

"When the city council in Austin, Texas, passed a single-use plastic shopping bag ban in 2013, it assumed environmental benefits would follow. The calculation was reasonable enough: Fewer single-use bags in circulation would mean less waste at city landfills."

"Two years later, an assessment commissioned by the city finds that the ban is having an unintended effect -- people are now throwing away heavy-duty reusable plastic bags at an unprecedented rate. The city's good intentions have proven all too vulnerable to the laws of supply and demand." (Minter, 2015)

Russ Hepler stated in [The Federalist Papers Project](#) the following:

"... As the old saying goes, 'the road to Hell is paved with good intentions.' Such is the case in Texas where one idea the environmentalists have pushed is actually making a problem worse, not better." (Hepler, 2015)

So are these journalists right? The answer is a resounding **YES**. Furthermore, if other communities with bag bans were to conduct their own self-assessment, the results would be very similar.

The report claims that Austin's bag ban sharply reduced usage of lightweight plastic carryout bags which in turn had a positive effect on reducing plastic bag litter. In fact, the report claims that the usage of lightweight plastic bags decreased from **263,801,371** to about **66,721,916**, an estimated **75%** reduction. This reduction is based on a comparison of one day city-wide cleanup events in both Austin and Fort Worth; cities with comparable populations, one with a bag ban and one without. (Waters, 2015, p. 13)

Despite the reduction in lightweight plastic carryout bag litter, the report's author questioned the success (i.e. he suggested the failure) of the bag ban because the weight of 4-mil plastic reusable bags disposed of, after only a single use, was as much as the lightweight plastic carryout bags previously used and disposed. (Waters, 2015, p. 28)

What the report did **NOT** do, was to analyze the impact of carryout shopping bags dumped in the landfill both before and after the bag ban. The weight of shopping bags disposed of in the landfill could have been very easily calculated and would have foretold the failure of the ordinance to achieve its primary objective. These calculations could be accomplished using a spreadsheet; estimated quantities of bags before and after a bag ban; and the average weight and recycling rate for each type of shopping bag. Had the City Council and City Staff just done their homework, they would have discovered, that after a bag ban the weight of shopping bags dumped in the landfill increases by a factor of four. For more information see the article entitled: "[California Landfills Impacted by Bag Bans](#)". (van Leeuwen, California Landfills Impacted By Bag Bans, 2014)

What the report also did **NOT** do is to provide a proper perspective about plastic bag litter. While the report identified a reduction of lightweight plastic carryout bags, it did not discuss the litter rate of 4-mil plastic reusable bags or other type of plastic bags that could potentially harm wildlife or become unsightly litter. For example, in San Jose California, litter audits show that 1 out of every 2 littered plastic bags is a lightweight plastic carryout bag. In other words, a bag ban will at most affect only about 50% of plastic bag litter. The remaining 50% of plastic bags (trash bags, product bags, and zip-lock bags) not removed by a bag ban are just as likely to be problematic for the environment and wildlife as the lightweight plastic carryout bags. (van Leeuwen, San Jose Litter Surveys Examined – Plastic Bag Ban Completely Unjustified, 2015)

What is even more troubling is that the report did **NOT** address how banning lightweight plastic carryout bags will impact the overall litter problem. For example, in an article entitled "[San Jose Painfully Learns Litter Problems Were Not Solved by Plastic Bag Ban!](#)" the author describes how the City of San Jose, California painfully learned from a Fish and Game environmental complaint and threatened lawsuits that the city's plastic bag ban did not solve litter problems in local waterways as required by the Federal Clean Water Act. The litter rate for lightweight plastic bags is so small, that banning the bags has a negligible impact on litter including litter in local creeks and rivers. (van Leeuwen, San Jose Painfully Learns Litter Problems Were Not Solved By Plastic Bag Ban!, 2014)

Appendix A shows a critical calculation **omitted** in the report: the proportion of lightweight plastic bags distributed by retail stores that are littered. For the city of Fort Worth, using information from the report, the proportion of lightweight plastic grocery bags littered is computed as **0.0036%**. This shows how small a percentage of bags distributed are actually littered. Furthermore, the roadside litter rate of plastic bags (of all kinds) is less than 0.6% compared to the fast food litter rate of **29.4%**. (Schultz & Stein, 2009)

Appendix B shows the cost impact to citizens of Austin's Single-Use Bag Ordinance, a cost **NOT** modeled or calculated in the report! In Appendix B, we see that the annual cost of carryout shopping bags increases from **\$13,128,928.74** to **\$36,494,029.57** for a net annual recurring cost increase of **\$23,365,100.83!** This cost does not include the cost incurred by the city or by retailers.

Why Austin's Bag Ban Failed

The failure of Austin's bag ban to meet stated objectives could have been predicted had members of the City Council not subscribed to environmental scams that play on emotions such as fear and doomsday scenarios! A careful analysis of the dynamics of a bag ban and the forces in play should have alerted city officials that achieving their objectives would be an uphill battle that would ultimately result in failure. While they recognized that voluntary programs would not achieve the desired results, they made the bag ban mandatory to force compliance. In so doing, the City Council lost sight of a very simple and profound fact. **Good solutions are eagerly adopted; Bad solutions must be mandated!** In other words, city officials failed to design a **win-win** solution that works for all shoppers.

In this section we will examine the issues and analyze the obstacles that stood in the way of success that led to this colossal failure.

Changing Citizen Behavior

In 2007, the city of Austin, Texas drafted a resolution, implemented in 2008, for a pilot program to reduce the quantity of lightweight plastic shopping bags entering the landfill by **50%** in one year. (Waters, 2015, p. 6) The program was voluntary and emphasized using reusable bags, reducing the number of lightweight plastic carryout bags distributed and improving the recycling rate of plastic carryout bags. (Coppola, 2011) The voluntary program only achieved a "mildly successful **20%** reduction" and not the original (and arbitrary) **50%** reduction desired. Therefore the pilot program failed to achieve its stated objectives. (Williams J. , 2009)

So on March 2, 2012, the Austin City Council passed a Single-Use Bag Ordinance (SUBO) effective March 1, 2013. The ordinance bans both "single-use" paper (a paper bag made from new material) and lightweight plastic carryout bags. In the event a shopper forgets or fails to bring their own bags, the retailer can provide a reusable bag, normally a 4-mil thick plastic bag or a recyclable paper bag (a bag made from at least **40%** post-consumer "recycled" content). The ordinance does not require the retailer to charge a fee; however, the retailer is free to do so. (City of Austin Texas, 2012)

It should be noted that both the voluntary pilot program in 2008 and the Single-Use Bag Ordinance in 2013 failed to achieve their primary goals!

The report also states that *“The most direct way to address and change the pre-existing norms is to craft legislation which is designed to alter the behavior of the citizen. Such was the case with the bag reduction ordinance passed in Austin. While some may view governmental involvement an imposition of unwanted control, it is often the case that heavier handed intervention techniques in the form of legislation mandating change become needed. And in this scenario, the more intense efforts will produce larger gains in terms of a social behavioral adaptation.”* (Waters, 2015, p. 7)

The above quotation is instructive of the mindset of Austin’s City Council and Staff – they are willing to use heavy handed techniques to change the shopping behavior of the very people who elected them into office and pay their salaries. It should be noted that the attitude expressed by city officials is not only shocking and un-American, but is counterproductive and fuels the opposition to the bag ban and the goals city officials are trying to achieve.

Plastic Bag Bans are an Inefficient Solution

The City of Austin, Texas like so many cities and counties recognized that changing the paradigm from store-provided lightweight plastic carryout bags to having shoppers bring their own reusable bags would require behavior change that many shoppers would be reluctant to adopt. Hence, a mandatory bag ban was put in place forcing shoppers to deal with the “new” paradigm.

Consider how a plastic bag ban attempts to change the shopping paradigm:

Pre-Ban - Before a Bag Ban is implemented:

- The store provides paper or lightweight plastic carryout bags to the customer at no charge.
- The shopper transports the purchases home.
- The shopper collects the carryout bags for recycling, reuse, or disposal.

Post-Ban - After A Bag Ban is implemented:

- The shopper must bring their own reusable bags to the store.
 - If the shopper forgets their reusable bags or did not bring enough, the shopper has the option to purchase recyclable paper or plastic reusable bags from the store or to carry the purchases out of the store in his/her arms or loose in the shopping cart to the car. If the user uses public transportation he/she is forced to purchase a bag if they don’t have one with them.
 - The shopper may be angry at having to pay for a bag previously obtained at no charge. (Which is why as many as **43.5%** of shoppers in San Jose leave the store without a bag!)
- The shopper transports the purchases home.

- The shopper collects the reusable bags, inspects them for damage, and washes the bags if needed, fold them and places them in a convenient place for the next shopping trip. Damaged bags are then recycled or disposed.

As can be seen from the descriptions above, it should be obvious that the most convenient and efficient manner to bring purchases home is using store-supplied carryout bags at no charge. Bringing and using your own reusable bags is inconvenient and inefficient, not to mention costly and time consuming.

Some like to say that using reusable bags is not so hard; However, in an article entitled “[Using Reusable Bags Not That Easy](#)” the authors explain exactly why that is not the case. There is much more involved in safely using reusable bags than what meets the eye. (Williams & van Leeuwen, 2014)

Plastic Bag Bans are Not Economical

In the article entitled “[Plastic Bag Alternatives Much More Costly to Consumers](#)” the authors show that the economic cost to a family of four using store provided lightweight plastic carryout bags is about **\$21** per year (indirectly), for store provided paper or plastic reusable bags about **\$78** per year, and shopper provided reusable bags about **\$300** per year. (van Leeuwen & Williams, Plastic Bag Alternatives Much More Costly to Consumers, 2013)

From an economics standpoint, shoppers are financially ahead by paying for store-provided bags rather than using their own reusable bags. Once shoppers become accustomed to the bag fees, more and more shoppers will choose to pay for store provided bags rather than bringing their own. In fact, in the article entitled “[Shoppers Reject Using Reusable Bags](#)” the author points out that shoppers reject using reusable bags by a ratio of as much as **2 to 1**. (van Leeuwen, Shoppers Reject Using Reusable Bags, 2014)

In Appendix B, the estimated cost to Austin residents before and after the bag ban is modeled and calculated. It will cost Austin residents an additional **\$23,365,100.83** per year to comply with the city’s bag ban. Since Austin’s self-assessment indicated that the primary objective of reducing the amount of lightweight plastic carryout bags dumped in the landfill was **NOT** a success, the only benefit received was a reduction in the quantity of littered lightweight plastic carryout bags. Assuming that Austin’s pre-ban litter rate is exactly the same as Fort Worth (see Appendix A) or **0.0036%**, the number of lightweight plastic carryout bags litter pre-ban is computed as **9,484** bags and with **1,131** recovered afterward for a net reduction of about **8,353** plastic bags. In other words, residents of Austin Texas paid an extra **\$23,365,100.83** per year to take groceries home and only **8,353** plastic bags were eliminated in the litter stream at a cost of **\$2,797.21** per plastic bag! Not counting the costs incurred by the city or by retailers! Sheer Insanity!

Ergonomic Concerns with Using Reusable Shopping Bags

In the article entitled “[Reusable Bags and Ergonomic Issues](#)” the author explains that one reason why some shoppers avoid using reusable bags is because of the oft touted selling point “*Reusable bags hold more*”. It never seems to occur to reusable-bag advocates that “*If reusable bags hold more, they weigh more!*” That means the handling of heavier reusable bags by both store employees and shoppers alike,

presents an ergonomic safety hazard that could lead to serious injury. In the article, the author shows that small, medium, and large reusable bags could respectively hold **10**, **25**, or **35** lbs. when filled. (van Leeuwen, Reusable Bags and Ergonomic Issues, 2013)

It should be obvious, that ergonomic considerations alone would indicate that using the heavier reusable bags is not for everyone. Can you imagine a frail, elderly, handicapped, or shopper with a bad back having to carry and lift a heavy reusable bag weighing as much as **35** lbs.?

Health Concerns with Using Reusable Shopping Bags

In the article entitled “[Bacterial and Viral Health Hazards of Reusable Shopping Bags](#)” the author identifies the bacterial and viral health hazards that reusable shopping bags present to the public. The author identifies that reusable bags should be washed or sanitized on a regular basis. The author also identifies that many shoppers do not wash bags or do so infrequently; that reusable bags can transmit disease; and that the homeless who live in their cars or in a homeless encampment in the river bottom do not have facilities to wash and sanitize reusable bags, thereby endangering themselves and the public. (van Leeuwen, Bacterial and Viral Health Hazards of Reusable Shopping Bags, 2013)

An intelligent person can see from the health hazards outlined above that the solution of using reusable bags does not work in the best interest of all customers, particularly the homeless! Reusable bags are not a good solution for every shopper! Especially for Californians who must use water to wash and sanitize reusable bags in the midst of a severe drought!

Forgetting To Bring Your Reusable Bags

Shoppers, no matter how well they plan their shopping trips, will find themselves forgetting to bring their reusable shopping bags. Reusable bags are frequently left in the car or even at home. Some shoppers may make an extra trip home just to pick up their bags. Forgetfulness is just part of the human condition. There is no law that can prevent that.

The best that you can do is to build good habits that help you to prevent it. For example, before you get into your car, you verify that you have your wallet with driver’s license; when you lock your car, you do so from the outside using your key or key fob; after unloading your groceries in the kitchen, you fold the bags and put them in the car ready for the next shopping trip; etc.

Obstacles That Led To Failure

The Austin Single-Use Bag Ordinance failed to meet its objectives because it failed to provide a solution that works for all shoppers. The ban failed to take the following factors into account:

- Convenience
- Efficiency
- Economic Cost
- Ergonomic Concerns
- Health concerns
- Human Forgetfulness

- Anger at Bag Ban and Bag Fees

All of these factors or obstacles work against changing the shopping paradigm. In fact, the bag ban solution is idealistic and utopian in nature and just doesn't work for most shoppers.

Resistance and opposition to the bag ban are not unique to Austin and occur elsewhere as well. Some examples include the following:

- Public support for the bag ban dropped **12%** six months after implementation. (Waters, 2015, p. 6) [Note: If it was a good idea, public support would have increased!]
- Stores within city limits lost on average **\$60,000 to \$70,000** per week because shoppers chose to shop outside of city limits. (Waters, 2015, p. 27) [This happens elsewhere too.]
- In San Jose, California shoppers who left the store with no bags increased from **12.9%** to **43.5%** and in Santa Monica, California from **15%** to **36%** after implementation of a bag ban. (van Leeuwen & Williams, Bag Bans: A Failure - Not Success As Claimed, 2013, p. 4)

The above examples are a clear indication that the bag ban as crafted is NOT a solution that works for all shoppers.

The Austin City Council should realize that environmental goals are best realized when the policies crafted have the full support and cooperation of the citizenry. Such cooperation is not obtained by shoving a bag ban down the throats of residents against their will. Cooperation comes by devising policies and solutions that are convenient, economical, efficient, and work for all residents.

The Report's Conclusions

The report included anecdotal observations that litter from lightweight plastic carryout bags decreased sharply following implementation of the city's bag ban. Some might call that a success, even though it follows that when you ban a product, you should see less of it in the litter stream; which is exactly what was observed. However, a bag ban is much more than just banning lightweight plastic bags; hence, success cannot be claimed unless you consider all of the elements that comprise a bag ban.

The report's author did conclude that the bag ban failed to decrease the weight of plastic shopping bags that ended up in the landfill. (Waters, 2015, p. 24) According Bob Gedert, director of Austin Resource Recovery, "*What we found was in the trash streams and recycling streams people were disposing of the reusable bags too soon. They weren't getting reused to the extent that we desired. Part of our reaction to the study is that we need to teach people to get the value in the reusable bags that can be used over and over again.*" (Cape, 2015)

To be more specific, most of the plastic reusable shopping bags were only used once before being discarded, just as the lightweight "disposable" plastic shopping bags were before the bag ban. (Cape, 2015) We might mention, that is not unique to the City of Austin, but occurs in other communities as well. (Nicholson, 2014)

Report Recommends Elimination of 4-mil Plastic Reusable Bags?

The self-assessment of Austin's Bag Ban recommends elimination of the 4-mil reusable plastic bag. (Waters, 2015, p. 28) The reason given by the report's author is to eliminate an additional **23** tons of plastic film entering recycling facilities and subsequently dumped in the landfill to further the city's Zero Waste Goals. Only plastic bags returned to the recycling bins at participating stores are recycled. (Waters, 2015, p. 23)

In the article entitled "[California Landfills Impacted by Bag Bans](#)" the author shows that a bag ban will put more than four times as much material (paper bags, reusable bags, replacement plastic bags, and remaining lightweight bags) by weight into the landfill. And that estimate assumed that reusable bags were used once per week for two years before being discarded; and not just used once and then discarded like in Austin, Texas. In other words, bag bans make matters worse by increasing the quantity of shopping bags that are dumped in the landfill, the exact opposite of what waste management organizations with their zero waste goals want! (van Leeuwen, [California Landfills Impacted By Bag Bans](#), 2014)

Successful Solutions Normally Incorporate Tradeoffs

The development of successful products and systems require scientists and engineers to make tradeoffs in order to maximize desirable characteristics and minimize or compensate for undesirable characteristics.

This is true for grocery bags as well, where a number of solutions with tradeoffs can be made:

- Use paper bags instead of thin-film plastic grocery bags. This eliminates litter associated with plastic grocery bags and protects the environment and wildlife. The drawback is that the volume of paper bags not recycled and disposed of in the landfill will likely be more than the thin-film plastic grocery bags disposed of before the ban. To compensate for this drawback, an effort to **increase the recycling rate of paper bags** will have to be made.
- Simply change the thickness of the thin-film plastic grocery bags to prevent the bag from becoming wind-blown litter. This solution solves the plastic grocery bag litter problem and protects the environment and wildlife. The drawback would be the risk of putting more plastic in the landfill. A public education effort to divert empty plastic shopping bags from curbside recycling and trash containers to recycling bins in local grocery stores will be needed. Of course if customers can remember to recycle these bags at the local grocery store, they can also reuse them.

Both of these solutions employ tradeoffs to solve the litter problem and protect the environment and wildlife. These solutions have "undesirable" components that require educating consumers regarding proper reuse and recycling of these bags. A voluntary program to use reusable bags can also be incorporated into the overall solution. This is a shopper friendly solution that works for all shoppers. No shopper should have to walk out of a grocery store without a bag or pay extra just to have a bag to carryout their purchases.

Conclusion

The primary goal of the Austin Single-Use Bag Ordinance was to reduce the volume of plastic carryout bags dumped in the landfill. The city's own self-assessment reported that the weight of 4-mil plastic reusable bags disposed of by shoppers after just a single use was just as much as the lightweight plastic bags disposed of in the landfill before the ban. It turns out, that shoppers treated store-provided 4-mil plastic reusable bags no different than the lightweight plastic carryout bags distributed before the bag ban. (Cape, 2015) In other words, the bag ban backfired and resulted in a much higher environmental cost after the ban was implemented. (Waters, 2015, p. 25)

Having said that, it should be pointed out that the failure of the Single-Use Bag Ordinance lies squarely at the feet of the Austin's City Council and city staff. The City Council and City Staff could have very easily predicted the failure of the ordinance by calculating the amount of carryout shopping bags dumped in the landfill before and after the bag ban. (van Leeuwen, California Landfills Impacted By Bag Bans, 2014)

Austin's bag ban, like so many bag bans across the nation, was designed to change the shopping paradigm from customers receiving store-provided disposable carryout bags to shoppers bringing their own reusable carryout bags. Changing shopper behavior is not that easy especially when the solution as crafted includes significant obstacles that must be overcome: convenience, cost, and efficiency. Add to these three the fourth obstacle of human forgetfulness and the bag ban simply becomes a nuisance! Shoppers are not stupid; they know a bad deal when they see it and they act in their own self-interest to minimize the impact of the bag ban just like they do for so many other nuisances that life throws at them!

As stated earlier, residents of Austin, Texas paid an extra **\$23,365,100.83** per year to take groceries home and only **8,353** plastic bags were eliminated in the litter stream at a cost of **\$2,797.21** per plastic bag. The city could have easily hired several unskilled workers to pick up plastic bags for much less than this.

Furthermore, the colossal failure of the Austin Single-Use Bag Ordinance is because the Austin City Council and city staff failed to do due diligence and instead jumped on the bag ban bandwagon without the kind of critical examination and cost-benefit analysis normally required. (van Leeuwen & Williams, Bag Bans Officials Neglect Homework, 2013) The failure of Austin's bag ban to reduce the amount of carryout shopping bags dumped in landfill was predictable. There is simply no excuse!

A bag ban by its very nature increases the amount of carryout shopping bags dumped in landfills making the problem worse and not better. **The best solution is to simply require plastic carryout bags to be made from a thicker plastic film, to reduce the chance of the bag becoming windblown litter. A win-win solution for both the city and shopper alike is simply to allow the free distribution of 2.25 or 4-mil-thick plastic carryout bags and then focus on recycling these bags through retail store recycling bins. Shoppers, who want to bring their own reusable bags, are free to do so.**

The City of Austin should seriously consider repealing their Single-Use Bag Ordinance (SUBO)!

About The Author

Anthony van Leeuwen is the founder of the [Fight the Plastic Bag Ban](#) website and writes extensively on the subject. He holds a bachelors and Master's degree in Electronics Engineering and has over 41 years of experience working in the federal government and private industry.

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APPENDIX A

PROPORTION OF LIGHTWEIGHT PLASTIC CARRYOUT BAGS LITTERED

What the report did **NOT** do, is to calculate the fraction of lightweight plastic bags littered compared to the total used annually. In Table A-1, the quantity of littered plastic bags collected during the respective one-day cleanup events in each city from the report is compared to annual usage. For Austin, the number of plastic bags used annually is based on the **75%** reduction cited in the report (Waters, 2015, p. 13). This is an important calculation in order to get a perspective on the magnitude of the lightweight plastic bag litter problem the community is confronted with. As can be seen from Table B-1, the problem is relatively small. While it is true a one day cleanup event may not be representative of the total quantity littered per year, which is unknown. However, we could assume that a one-day cleanup event held 10 times per year (every 5 weeks) with the same results, the fraction of littered bags to annual consumption would be estimated to be 10 times greater than what is shown in table A-1. Again, a very small number and a very reasonable worst case estimate of plastic grocery bag litter.

Table A-1. Fraction of littered Lightweight Bags Compared to Annual Usage

	Austin	Fort Worth
Population in 2009	786,386	727,577
Average number of bags used per person per year	85†	335
Number of Lightweight Plastic Carryout Bags used by each city based on population in 2009	66,842,810†	243,738,295
Number of littered Lightweight Plastic Carryout Bags collected by Keep Austin Beautiful Clean Sweep Event	1,131	
Number of Lightweight Plastic Carryout Bags collected during Cowtown Cleanup Event		8,757
Fraction of littered Lightweight Plastic Carryout Bags compared to city-wide annual usage	0.0017%	0.0036%
† Equivalent number of plastic bags per person based on 75% reduction. (Waters, 2015, p. 13)		

Knowing the proportion of plastic bags littered to the plastic bags used, shows the disproportionate effort and cost involved in solving such a minor problem.

APPENDIX B

ESTIMATED COST IMPACT TO CITIZENS FROM AUSTIN’S SINGE-USE BAG ORDINANCE

In an article entitled “[What Will A Plastic Carryout Bag Ban Cost Your Community](#)” the author models the cost increase to residents of Ventura and Santa Barbara counties in California. Using the same modeling method and assumptions, the estimated cost increase for Austin residents is an estimated **\$23,365,100.83** annually as shown in Table B-1 below. Note, that this cost estimate does not include costs incurred by the City of Austin or by local retailers. (van Leeuwen, What Will A Plastic Carrout Bag Ban Cost Your Community, 2013)

Table B-1 Austin Lightweight Bag Ordinance Net Cost Increase to Consumers

	Austin
Population in 2009	786,386
Number of Households (2.75 persons)	285,959
Pre Ban	
Households Using Plastic Carryout Bags (69%)	197,311
Household Plastic Bag Annual Cost (\$20.80)	\$ 4,104,077.04
Households Using Paper Bags (5%)	14,298
Household Paper Bag Annual Cost (\$78.00)	\$ 446,095.33
Households Using Reusable Bags (10%)	28,596
Reusable Bag Annual Cost (\$300.00)	\$ 8,578,756.36
Pre-Ban Total Annual Cost	\$ 13,128,928.74
Post Ban	
Households Using Paper Bags (29%)	82,928
Household Paper Bag Annual Cost (\$78.00)	\$ 6,468,382.30
Households Using Reusable Bags (35%)	100,085
Household Reusable Bag Annual Cost (\$300.00)	\$ 30,025,647.27
Post Ban Total Annual Cost	\$ 36,494,029.57
Net Cost Increase (Post Ban - Pre Ban)	\$ 23,365,100.83

It should be noted that the annual increased cost of over **\$23,365,100.83** recurs year after year, taking money out of Austin’s economy for **no reduction in the amount of plastic dumped in landfills** and to spare city workers from **cleaning up 8,353 fewer plastic grocery bags per year**. The people of Austin, Texas are being fleeced big time by their own city government and the special interests that forced a bag ban down their throats!