



Process Improvement for Brian Boru County Landfill Congestion

Abstract

This proposal aims to ultimately eliminate the queuing of traffic at the Brian Boru County landfill where both residents and businesses have complained of unreasonably long lines and wait times.

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DISCOVERY

- What are the busiest hours of operation at the landfill site?
- Is there a category of waste that is a contributing factor to the congestion?

We should begin with an on-site observation of the process and a survey of the landfill staff to determine the most problematic times of day or days of the week, if any.

ASSUMPTIONS

- The busiest time of day is between the hours of 10:00 AM and 2:00 PM.
- The day of the week and category of waste did not seem to be consequential in our study.

At first blush, it would be easy to suggest adding another lane of scales to the operation to double capacity, extend business hours or perhaps even open on Sunday, when it is usually closed. All of these options are exceedingly expensive propositions and unlikely to garner much support within the county or the community and they would be difficult to reverse should the pilot fail to achieve our strategic objective.

CONSIDERATIONS

- Since it appears that time of day has the greatest impact on the landfill queue, then the natural antidote would be to encourage more customers to utilize the site during less busier times. At present, the site is open between 6:30 AM and 5:00 PM or 10 hours 30 minutes during weekdays, except on Saturday when it is open for half days, and it is closed on Sunday.
 - How could we influence or incentivize such a behavior?
 - Offer a discount during our off-peak hours.
 - During the week, we could operate between 10:00 AM and 2:00 PM or about 38% of the business hours at new peak pricing.
 - A two-tiered tip fee schedule would offer a discount option to the thrifter-minded customer, and hopefully, steer them to the remaining 62% of the time when the site is less busy.
 - At the end of the day, money or in this case, savings is the universal motivator.
 - There is the risk of losing revenue or having to subsidize more of the operation with taxpayer funds, neither of which would adhere to our commitment to good governance principles.
 - This all seems simple enough, but what about the potential for revenue losses discussed earlier?

CONCEPT

- Let us say that the site receives 1000 vehicles per day and \$1.00 of revenue from each, so the day's take is \$1000. Let us also assume that each customer deposits 1 ton of waste at \$1.00/ton, just to keep the math simple here. If we can divert 600 customers to off-peak hours at \$0.80, then those customers would generate \$480 in revenue for the day, and the remaining 400 customers would be assessed at \$1.30, which is \$520, so it would be the same \$1000 per day. The discount merely offsets the price increase during peak hours, which only accounts for two-fifths of the day, 38%, or 4 hours of the 10-hour 30-minute day.
- Positioning is important here, because no one likes to see a pricing increase, although it is inevitable at some point, but this new tip schedule can be positioned as a 20% reduction over old rates for off-peak, which is 60% less than peak rates, which really only increased 30% more than our starting point.
- It is also worth mentioning that 6 hours 30 minutes are 20% cheaper than ever before! So, it can be done, and it can be reasonably sold as "beat the wait, save 20%, enjoy our new enhanced tip fee schedule, which you can view at www.bbcgov.com/tip/fees."

- It is important to position this pricing change well, as we are not arbitrarily raising prices, but rather, we are offering options, some of which offer the exact same service, but at a significant discount even over the existing pricing and the customer will spend less time waiting in those long queues, which is a value-add for all.

POTENTIAL RISKS

- Customers from neighboring counties could view the discount as incentive enough to drive out of their way to use the Brian Boru County landfill, which could potentially add more congestion and put pressure on site capacity, as it is not an unlimited resource either.
 - The discount is not likely strong enough to justify the additional cost of fuel, time, wear and tear over more local options and is therefore unlikely to have a significant impact.
- The peak rate is also unlikely to push customers away to neighboring landfills for the same reasons, and it is fairly safe to assume that this customer would likely take advantage of the 20% discount that is available 62% of the time.

MARKETING STRATEGY

- The new tip fee schedule is great, but only if customers know about it, so a short campaign should take place to get the word out.
 - Electronic forms of communication are the lowest cost, but can have a narrow reach, so some budget may have to be allocated for print and or billboards that point to our online resources.
 - The print option could be as simple as a message at the bottom of the receipt that cashiers provide at the site presently and it does not contribute to added paper waste or costs.
 - Cashiers should also be proactive about advising of the off-peak pricing.
 - It is important to mention again that all forms of print should always point to an electronic source of truth, which is in keeping with good governance efforts to save green, both monetarily and environmentally.

STEWARDSHIP

- As good stewards of the county's resources and environment, we certainly want to be considerate of how our decisions might impact other aspects of our purview. For example, if we doubled the tip fee for a mattress from \$10 to \$20, then we might see an uptick in abandoned mattresses on the sides of our highways, medians, and neighborhoods, which could severely and visibly call into question our decision-making process before our most important audience, and that is the taxpayer. All efficiencies or economies have tradeoffs, risks as they have potential rewards, but we must put ourselves into the lives of those that it is most likely to impact, which should guide us towards what really matters here. We do not have to over-explain, but we do need to make sure that enough of the actual "WHY?" is not kept a mystery.
- In the future, a technological solution may be worth considering, and it should be explored. Would a new technology be cheaper than adding additional scales, more staff, or longer hours? Perhaps, but maybe not yet, so it should be revisited periodically as new options become available. The process is still very manual, which is surely a pain point, as it usually involves customers having to get out of the vehicle, weigh-in, interact with a cashier to describe the load, get directions to the correct disposal site, and then finally make their payment as they return and weigh-out. It is a complex problem for what is seemingly such a simple process of waste disposal, but that is for another initiative down the line.

In closing, the proposed solution has the effect of maintaining the revenue at current figures while alleviating congestion at the scales, and does not require additional staffing, new expenditure, equipment, lanes, or longer hours of operation and some residents and businesses may even realize both a savings in terms of money and their valuable time.