BINGHAMTON UNIVERSITY STATE UNIVERSITY OF NEW YORK

Background

- Binghamton's Blue Bag Policy, introduced in 1991, uses a pay-as-you-throw system that charges residents based on the volume of waste they produce by mandating the use of city-approved garbage bags to incentivize recycling and fund landfill tipping fees that cover landfill operating costs (incl. labor, equipment, and maintenance).
- Similar volume-based pricing programs were introduced in the 1990s across the U.S., including Chicago's now-defunct blue bag system. At the same time, cities like San Francisco shifted to more efficient three-stream models (recycling, compost, landfill).
- Today, high pricing and limited retail availability due to inconsistent stock and store closures, paired with higher costs on online platforms have made Binghamton's blue bags harder to access, especially for low-income households.
- The system has drawn further criticism due to bag durability issues and insufficient public education on proper usage. These issues are prompting calls for reform at city and county levels because Binghamton uses the Broome County landfill.
- According to county officials, the current system also has improper sorting and contamination issues, as a significant portion of biodegradables still end up in landfills.

Methodology

- Evaluated the effectiveness of Binghamton's blue bag system against three-stream waste management models used in other municipalities.
- Assessed potential economic savings through reduced landfill tipping fees and overall operational efficiencies, (cost-benefit analysis).
- Applied the Institutional Analysis and Development (IAD) framework to analyze policy performance when considering systemic and external challenges.
- Gathered qualitative insights from city officials and relevant stakeholders to understand on-the-ground issues and potential reform feasibility.

Evaluating Waste Management Reform in The Municipality of Binghamton

Source Project: People, Politics, and the Environment

Percent of Annual Median Household Income Spent on Garbage Bags for Waste Collection (30 gal/wk) 0.30% 0.20%

New York City Binghamton









Final Paper:



References:



By: Shreyash Shrestha

Findings

• Assuming a household generates 30 gallons of garbage per week (exactly one large blue bag), Binghamton residents end up paying over 0.3% of their median household income. This is around 12.6x more than a median-income New York City household that would only pay around 0.025% of their income under a similar scenario.

• Despite efforts in 2012, including a sticker program designed to curb the disposal of oversized garbage, a significant percentage of collected materials still ended up in the landfill, indicating a systemic challenge in waste diversion.

• Comparisons with San Francisco's three-stream approach reveal that lower landfill tipping fees and higher diversion rates are achievable. This is because the system's lower tipping fee highlights operational efficiency that reduces the costs associated with landfill disposal.

• San Francisco's pricing model charges residents a base fee based on the number of housing units they own, with additional collection fees calculated via a volume-based system. This approach creates a more affordable and equitable waste management system compared to Binghamton's current model.

Conclusion

• Transitioning to a three-stream system like San Francisco's and their pricing model can reduce the financial strain on low-income households by lowering overall landfill tipping fees and shifting pricing to a more equitable model.

• Enhanced waste sorting and collection processes in a multi-stream system can lead to improved efficiency and an overall higher diversion rate.

• Increased waste diversion through recycling and composting will reduce landfill dependency, further lowering operational costs and contributing to significant environmental sustainability gains.

• Modernizing the waste management system with a three-stream approach offers a robust model for long-term fiscal and environmental resilience by promoting a circular economy that benefits both the community and municipal governance.