

## **Leadership, Coordination and Evolution of Solid Waste Advisory Boards: Lessons from New York City**

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### **Abstract**

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*Advisory boards provide useful platforms for government engagement with smaller groups of citizens. This paper examines the case of the Solid Waste Advisory Boards (SWABs) operating in New York City. A theoretical framework is presented with components related to the function, structure and operation. The historical context sets the stage for examination of recent developments of SWABs in New York City in 2024. Perspectives of individuals in leadership roles include examination of attitudes, group structure, sponsor relationships, successes and challenges including influence on solid waste policy. The study finds that since formation these bodies have functioned intermittently with structure and operations influenced by sponsorship, policy and political leadership transitions. The SWAB's have played an active role in public education and solid waste planning, and leadership has required commitment, passion, innovation to overcome challenges in resources, membership engagement, and representation.*

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**Keywords:** Citizen advisory boards, Municipal solid waste, Solid waste advisory boards, Citizen engagement, advisory board leadership

### **Introduction**

Effective solid waste management in large urban areas in the United States involves complex dynamics that include government decision-making, informed by diverse strategies for citizen engagement. Large cities are important cases because they are engines of consumption, production, and waste (Koop & Van Leeuwen, 2017; Grimm et al., 2008; Bai, 2007). Citizens' advisory boards are useful in various realms of public policy, including the environmental sphere (Santos & Chess, 2003). These boards are defined by Applegate (1997) as entities where members are "selected by a sponsoring agency (or other entity whose actions are at issue) from among citizens who are interested in or are in some way affected by the agency" (p.921). They overcome limitations of other formal mechanisms of citizen involvement because of people's ability to use these platforms to delve deeply and play a proactive role in shaping government policies, proposals, or implementation. The boards create forums for deliberative discussions, where an array of citizens can join those with specialized or technical expertise and spend time to become informed about an issue and gain knowledge to weigh in on decisions and activities.

Other research identifies similar citizen participatory structures, such as citizen advisory committees (CACs), exploring their function as a mechanism for public involvement with government (Lamkey, 1963; Hannah, & Lewis, 1982). Lynn and Busenberg's (1995) analysis of citizen advisory committees in environmental decisions distinguishes these entities as often not having final decision-making power, characterizing them as "a relatively small group of people who are convened by a sponsor for an extended period of time to represent the ideas and attitudes of various groups and/or communities for the purpose of examining a proposal, issue, or set of issues" (p.148).

## 1. Purpose of the Study

Because of New York City's role as the largest municipality in the United States, with a population of 7.9 million generating over 18,000 pounds of waste daily, understanding the dynamics of how the City capitalizes on citizen input into waste policy is critical (World Population Review, 2024; Badger, Buchanan, 2024; NYC Mayors Office of Sustainability, n.d.). This paper explores the case of Solid Waste Advisory Boards (SWABs) operating in New York City in 2024. Past research on the quality of citizen participation such as that occurring in citizen advisory boards focuses on outcomes and effectiveness, with little research shedding light on more recent practices of specialized boards, including structure, functions, or perspectives of those in leadership roles (Beierle, 1999; Beierle, 1998; Halvorsen, 2003; Rebori, 2011). We begin with a presentation of a theoretical framework and methodology, then examine the application of the model to three broad areas of SWAB organization. The analysis includes a discussion of SWAB's challenges and critical role in shaping the City's movement towards a resilient system of solid waste. The analysis also presents insights into the advisory body's relationships with sponsors, its ability to influence policy and planning, and insights into future recommendations of individuals in current or past leadership roles.

### 1.1 Method

This study involved the development of a theoretical model of citizen advisory group alternatives pictured in Fig 1 to set the stage for examining the case of the New York City SWABs. A qualitative research approach included interviews and participant observation, with invitations to all the chairs in each of the four operating SWABs in New York City in early 2024, in the Boroughs of Manhattan, Brooklyn, Queens, and the Bronx. Consent for interviews was granted from leaders of all but one of the borough SWAB's, including two current and two retired SWAB chairs (based on interviewee referrals), who also served as longstanding SWAB members in their respective boroughs. Results were analyzed using thematic coding. The interviews explored the interviewee's current and past roles with the SWAB, how they initially became involved, views about the SWAB's purpose, structure, process, and logistics, what they enjoyed about the leadership role, including successes and memorable activities, and finally, challenges and future recommendations. Interviews were supplemented with a review of available websites of the existing SWABS, analysis of published literature and reports about the SWABS and participant observation by the author as a nonmember in many monthly meetings of the SWAB operating in the Brooklyn SWAB over approximately one year between 2023 and 2024.

Limitations include the fact that not all current Chairs accepted interviews and that the research could not include detailed analysis of all subcomponents of the presented theoretical model; thus, the study is exploratory, paving the way for future investigation. Feedback loops between elements in the theoretical model may exist, which are beyond the scope of this study. Resources, for example, may impact group effectiveness. Studies by investigators such as Zeiss (1994) examine the effectiveness of tools used in cases where similar groups impact the screening of solid waste management facilities, while Santos and Chess (2007) contrast user-based versus theoretical criteria, drawing on participants' perspectives and fairness as measures of successful citizen advisory board processes. This study, in contrast, did not focus on membership feedback but on discussion of a broad theoretical framework and leadership perceptions.

### 1.2 Theoretical Framework

Citizen advisory bodies are a tool for shaping community response to various management and policy areas, but they have some variations. Table 1 presents a model representing an overarching framework of three critical aspects of small group advisory bodies organization including structure, function, and effectiveness that are the focus of this case study of SWABs. The model illustrates five structural components, including potential labels, options for missions or charges that may be broad and thematic, or more limited and specific, and types of sponsorship, representation, and composition (Freudenthal, 2004; Applegate, 1997). The model incorporates some components of Smith's (1977) analysis of advisory committees and boards that defined these bodies as increasingly important, playing an advisory and political role, with a charge that is either statutory or at the sponsor's discretion. Sponsors may represent different levels of government, with options for the nature of relationships with advisory groups that are either close, distant, or evolving. The nature of relationships sometimes relates to phases of the group's activities. Composition is also varied, often reflecting the mission or charge.

The advisory bodies' function may vary based on four areas: the period of operation, leadership, levels of participation, and available resources. Finally, the effectiveness of the bodies relates to the two factors of outcomes and outputs. Outcomes of the work may, following Beierle's (1998) theory, range from substantive changes in "decisions, conclusions or recommendations" (p.4), often focused on specific facilities, versus influence on a broader range of social goals, including improved public knowledge and engagement, processes for decisions, positive public views about agency activities, and reduced stakeholder friction. These may arise from a range of the second area that focuses on outputs, including reports, proposals, plans, or plan changes.

## **2. Results: New York City Solid Waste Advisory Board Case Study**

### **2.1 Structure: Mission and Sponsor Relations**

In New York City, government-sponsored citizen participation in solid waste advisory bodies evolved since the 1980s through the formation of the first advisory body, labeled Citizen's Solid Waste Advisory Committee (CAC), to deal with issues surrounding proposals for a waste-to-energy facility in Brooklyn (Clarke, 1993). Borough presidents in the other boroughs in the City embraced the model, launching their solid waste CACs, with accompanying government funding allocated to the groups to hire consultants. The mission and composition of the groups, including the orientation towards the focus on recycling, evolved several years later, from the passage of LL19, the legislation creating mandatory recycling in New York City passed in 1989. Clark (1993) notes that:

In requiring 25 percent recycling by 1994, Local Law 19 renamed the five borough-wide CACs as SWABs, expanded the membership to include a wider diversity of citizens, and made them responsible for advising the Borough Presidents and DOS on recycling matters in addition to incineration. In addition, a Citywide Recycling Advisory Board (CRAB) comprised of members appointed from the five SWABs was also mandated. The purpose of these bodies is to provide oversight of the implementation of Local Law 19 and to provide oversight and input into various aspects of the solid waste management planning process for the City, including review of the DOS annual recycling plan (p 455).

Active advocacy by the Solid Waste Citizen's Advisory Committees by 1989 helped move forward the LL 19 legislation mandating recycling, which also included language changing both the name and focus of activities from the original Citizen's Advisory Committees to the formation of Solid Waste Advisory Boards (SWABs).

The current interviews with the SWAB leaders highlighted views that the goal of the SWABS was originally, and remains currently, to serve as an advisory board to the Borough President. One chair comments, "The way the structure is set up, all of the SWABS are tied to the Borough President's office, and all of the SWABS have a good relationship to the Borough President's office. We often talk about our positions on things like cuts to composting and issues on recycling. The Borough President sometimes delivers testimony based on what we advise."

The City's 2006 administrative code Title 16-318 outlines the mandate with more specifics, charging that the groups, including all members and the Borough Presidents, should receive formal written plans from the Sanitation Department to be distributed within defined times (three months). It also calls for organizing public hearings to help devise "written recommendations to its borough president, the department, and the council" concerning the recycling program within its borough (Justia US Law, 2024). The bodies should give yearly advice to the Borough President on a range of matters, including goals and levels of achievement of recycling and reduction, and also engage in community education participation and meet the requirements of the former "citizen's advisory committee on resource recovery" (Queens Solid Waste Advisory Board, n.d.)."

The published mission of the Brooklyn SWAB affirms recognition of the functions outlined in the code, framing their charge as "a trusted community resource to the Brooklyn Borough President and City Council members on issues related to waste in our borough" (Brooklyn SWAB, n.d.). The Queen's SWAB describes itself as a diverse group from the borough "committed to working towards a greener, cleaner, and more equitable future (Queens SWAB, n.d)." All four city SWABs also place emphasis in their purpose statement on helping their borough move towards the city zero waste goal, a reference to the goal of sending zero waste to landfills by 2030 originally articulated plans launched by former New York City Mayor De Blasio in 2015 (Manhattan SWAB, n.d.; NYC Mayors Office of Sustainability, n.d; Brooklyn SWAB n.d., Queens SWAB, n.d.).

The Brooklyn SWAB aims to advise on activities and programs related to waste prevention, reuse, and recycling. At the same time, the Manhattan SWAB, in contrast, outlines fourteen areas related to waste collection, education and enforcement, and environmental policy in which they aim to influence policy, funding, and thought leadership (Brooklyn SWAB, n.d.; Manhattan SWAB, n.d.) The Bronx Borough President reactivated the Bronx SWAB in 2021, with the mission of the group changing from the original focus primarily on solid waste in the late 1980s "to a broader and expansive environmental justice initiative, covering a range of different topics." The stated descriptions of the group also affirm commitment to working towards New York City's goal of Zero Waste by 2030 with responsibilities to provide policy input and engage with local communities on all matters about environmental justice and sustainability (Office of the Bronx Borough President, 2021)

Interviewees, particularly some chairs with more extended involvement, describe historical challenges in relationships with various Borough Presidents due to changes in the values, approaches, and priorities of various individuals holding the position over the years. Interviewees stated that some Borough Presidents treated the SWABs with more respect, providing more support, resources, and encouragement for Sanitation department engagement at meetings. Other Borough Presidents were not perceived as so supportive, resulting in periods when the culture of the SWABS was described as "completely changed" to what one interviewee calls a "more corporate feeling."

Several respondents defined the purpose of the SWABs more broadly, pointing to the need to advise the New York City Department of Sanitation, City Council, and other elected officials on waste issues. The interviews highlight the importance of the relationship of the SWABS to critical actors in city solid waste policy, such as the Chair of the City Council Sanitation Committee. One interviewee commented, "Legislators are generalists, but we are garbage nerds—we want there to be a solution that is equitable." The interviews reveal navigational challenges with stress due to individuals' transitions in and out of those critical roles. Because relationships with the solid waste policy "powerbrokers" in the City are built slowly over time, the interviews reveal that movements out of roles by individuals involved a slow process of rebuilding trust. Some interviewees reflected on the solid relationship with the city council sanitation committee, although expressing sadness about the "great relationship" with a council sanitation committee chair who was leaving. Initial meetings began with the new sanitation committee chair. There was a sense that the work put into building relationships was challenging but also meaningful, as one interviewee comments, "The engagement we have with city officials—that takes work. That they listen and want to know what we have to say."

The relationship of the SWABs with the city sanitation department has also evolved. The interviews affirm the influence of the boards on city solid waste planning in the 1990s, and several interviews show changing relationships with the department. In the early days of the citizen advisory committees, agency personnel were quite active, participating regularly in meetings, particularly those of the Manhattan SWAB. In the Brooklyn SWAB by 2024, the agency will occasionally participate when agency officials receive invitations to discuss particular salient sanitation issues facing the borough. Presentations by agency representatives provided a vehicle for crucial agency officials to inform SWAB members about details of agency public outreach or policy implementation efforts, with dialogue in open discussions after the presentation about ways the agency might be more effective. By 2024, interviewees also revealed that all SWAB chairs were coming together and working jointly to meet more regularly with the city Sanitation agency. One states:

We are slowly building a relationship with NYCDSNY. This was a hole...each quarter, we meet as all of the SWABS with the Commissioner...we have done four meetings so far. Our relationship with them is being flushed out. Our strongest relationship is with the Borough President.

They indicate that meetings with the agency at the time of this study primarily focused on the rollout of new mandatory composting requirements and issues surrounding budget cuts impacting community composting programs, which were salient waste management issues. In 2024, the New York City Mayor directed cuts to community composting programs that many SWAB members felt were important.

Some interviewees described the joint SWAB meetings with the agency. "Our meetings were around how to fund the program. So we were asking questions like why they made the cuts. Part was getting information, and part advocacy. What can we do through the council? Should we give you information? How to mitigate the hardships?" One interviewee expressed some concern about their perception of the "decide and defend" approach of the agency, focusing on talking about programs that they were rolling out rather than seeking advice from the SWAB chairs. "Generally, DSNY has already decided on programs. There were one or two instances where we have posed a question or give advice on an approach, but it is mostly DSNY giving their final position to the SWABS."

## 2.2 Representation and Composition

The challenges of membership in the SWABs vary across the four boroughs of New York City, with differences in participation levels and structural aspects of membership appointment and representation. In Queens, members are now appointed to represent each of the borough's community boards. One interviewee stated that this structure has both pros and cons. "While all of the borough community boards have an appointed member, most of the community boards do not send members. Technically, we have thirty-four community board members, but we usually get around 17 to 20 attending."

The Manhattan SWAB has thirty-eight members chosen by the Manhattan Borough President, each serving for two-year periods. Three members, plus an executive group and steering committee, provide leadership. Members must be a range of individuals, including "solid waste management industry veterans, waste reduction consultants, sustainability professionals, academics, concerned citizens, and more" (Manhattan SWAB, n.d.). The interview revealed that in addition to a few community boards sending people, various participants represent organizations involved in different aspects of solid waste and a variety of individuals interested in waste. One interviewee commented that in their SWAB, "We also have waste hauling groups and business interest groups, and some of the larger BIDS (Business Improvement Districts) also attend." In one period, an interviewee described challenges with one Borough President suddenly instituting more rigid vetting processes for existing members, requiring members "to fill out questionnaires, submit resumes and do interviews." They also announced changes to committee structure, eliminating a waste prevention committee. This change was reported to have chilled board dynamics, and "many people just left."

In the Brooklyn SWAB, individuals apply to the Borough President for membership, and that office vets' applicants for conflicts of interest. There is a rolling application process, and the Borough President decides who to nominate. There are now around twenty-five members, including individuals from environmental justice organizations, nonprofits, community gardens, business owners of compost collection organizations, and at least one industry consultant. People are free to join committees, and committees and meetings are open for participation by members or nonmembers.

## 2.3 Function, Logistics, and Participation

Concerning the time of the SWAB's operation, the interviews revealed perspectives on the evolution of the groups in subsequent years since the early days of their formation. While the groups are ongoing without a set termination date most SWABs followed years of activity by a phase when they became dormant, with only some ceasing operations altogether. One SWAB chair describes this:

When the SWAB was set up in the 1990s, there were five groups, including the CRAB (Citywide Recycling Advisory Board). They existed at the start, but following the period around the September 11 incident, when recycling was cut from the city budget, a lot of the SWABS became dormant. Staten Island is now the only borough that has none-- that SWAB stopped after the closure of the Fresh Kills landfill. Most of the others stopped. The Citywide CAC stopped; The Manhattan SWAB was the only SWAB that never stopped. Community groups started to meet again around 2019.

Another chair comments on their ability to deal with participation and membership, expressing pleasure about overcoming the challenge of getting a quorum of members to meetings. Amendments to the board's bylaws, particularly some rigid provisions related to "good standing," played a key role. Some interviewees mentioned difficulties in achieving membership quorums and managing various subcommittees, including the need to cultivate leadership and sustain ongoing participation, with several noting diverse levels of commitment to the organization among various members.

One SWAB requires members to be active on committees and attend at least half of the yearly monthly meetings. The issue of diversity was also mentioned, with one commenting that, "We have a savvy membership, but we also need to make our membership more diverse."

Technology and the increased use of online tools, such as Zoom, as a meeting strategy starting during the COVID-19 pandemic, was a major transformational issue influencing group and committee participation. Several interviewees stated that most meetings were now on Zoom, while meetings were in person before the pandemic. Hybrid meetings, a mix of in-person and online, was a strategy used to various degrees by the time of the interviews in 2024, and even boards not using this regularly expressed interest in increasing that approach. Technology was also helpful with meeting quorums, with electronic polling making it easier to vote and reach a consensus on important matters such as city council testimony.

Each interviewee highlights the active role of the various SWAB committees, with a diverse collection in each borough as a framework for member engagement. The Manhattan SWAB has subcommittees on legislation, outreach, long-range planning, fundraising, data and technology, organics, residential recycling and reuse, textile waste, waste prevention and reuse, and social media and public relations. A committee also focuses on the New York Housing Authority waste issues. The Brooklyn SWAB includes six committees, an executive, and groups working on organics, legislation, events, outreach, and public housing. The Queens SWAB also has an environmental justice committee that was historically active on the New York State Climate Leadership and Protection Act focused on communities in disadvantaged areas with statements that "Folks noticed that in Queens there was underrepresented refunding of infrastructure, and we have submitted comments on why some areas in Queens are not included—they work on monitoring of 311 for illegal dumping, unsanitary conditions." Collaboration between the respective borough SWABS over time developed shared committees facilitating inter-borough engagement in events and activities. The Queens New York City Housing Authority and organics committees now meet with the Manhattan Solid Waste Advisory Board to work on activities, including budget cuts and advocacy.

Regarding resources for board operations and activities, several interviewees report needing more funding for organizational operations, contrasting with the initial government funding allocated for consultants of \$100,000 at the time of the formation of borough Citizens Advisory Committees in the 1980s. The interviews reveal that rather than relying on external resources, one of the boards was innovative in raising funds, soliciting donations, and initiating creative activities such as organizing public film screenings and panel discussions on issues related to solid waste, including the films "*Microplastics*" and "*Wasted*." One of the SWABs engaged in two grant programs that involved the group serving as a funder of a composting grant. One former Chair recalled, "We held a fundraiser and gave one thousand dollars to compost. We had a relationship with the Citizens Committee of New York, who matched our money." In 2017, the SWAB decided the reuse issue also needed money, establishing a *Reduce, Reuse, and Repair* grant. The SWAB received sixty-eight applications and gave out funds of up to \$2000 per outfit. However, by 2020, the pandemic resulted in the end of this initiative.

Several interviewees also mention some stressful aspects of bureaucratic processes related to funding, particularly government allocations, such as requirements to craft and respond to letter requests for funding to cover board activities such as events or field trips. One Chair commented, "There is a specific process to get funding. We get funding—for example, if it is food, we get sponsors. Funding has been an issue because we must keep all receipts to be transparent. We never have resolved the funding issue."

#### **2.4 Leadership Attitudes and Challenges**

In terms of evolution to leadership, all interviewees mentioned that engaging in activities or committees was an important stepping stone for moving into the chairmanship role. Demonstrating interest and commitment in subcommittees enabled them to become more knowledgeable and to gain a positive reputation and track record. All those interviewed also described having previous professional roles in nonprofits or government organizations active on environmental or solid waste issues. One Chair described their journey to SWAB leadership through working in an environmental organization and educating school students to put waste into the correct bins. "I was first just coming to meetings, and then I was invited to be a member and appointed to the board. We started an events committee and did several in-person events." Another chair worked with a citywide environmental organization engaged in borough beach clean-ups and plastics management, joining the group a year before becoming Chair. "The Board was new when I joined, and I became chair of the planning committee, so I was a candidate for chair." A third former chair had previous work experience in a sanitation agency.

Regarding attitudes towards leadership, there were several aspects of the role that chairs enjoyed. Several mention leadership resulted in a transformation of their perception of solid waste, with one commenting, "Originally I got involved because I wanted people to put stuff in the right bins, but then I realized it is not about individual solutions, it about systemic problems." Another stated:

The opportunity to make a difference in terms of engagement with critical problems the City was facing regarding waste was also energizing. In terms of the fact that New York is currently in a crisis with cuts to funding for organics, we need to be focused on rowing in the same direction. It is not just about managing solid waste, but about reducing our waste at the source. Some legislation is important, and there is work at the state level, work on organics—it is worth fighting.

Another recurring theme was new opportunities for engagement with people with various levels of interest and expertise in the solid waste field. One commented that they "love to be able to listen to the membership about what is interesting," while another said they "enjoy meeting a lot of new people." In addition, several mention that the role allowed them to engage with key players both in solid waste planning, policy, and implementation, as well as community organizations active in solid waste management, reduction, and recycling in the City and their boroughs. One interviewee said that in addition to the quarterly meetings with the sanitation agency commissioner, "many community organizations are interested in solid waste and what they are doing and their priorities. Many have never heard of the SWAB."

The interviewees also reveal helpful aspects of leadership. In establishing agendas, several highlighted the value of inheriting a standard "template" for organizing meetings, which was a helpful guide. Meetings start with a guest speaker, an expert, or an organizational representative working on a specific solid waste issue. Following these speakers, the template called for opening the floor to subcommittee chair reports to update the board on current activities, plans, or decisions. Following subcommittee reports should be a time for open discussion or questions from the floor. Occasionally, chairs reach out for suggestions from the floor for speakers. Meeting observations reveal that this method of organization was often followed, with some variations. For example, in several meetings, there is formal time for updates on new developments or activities relevant to solid waste by the Borough President's office representative. The experts brought into the meeting are wide-ranging, including speakers focusing on many solid waste issues in specific sectors, such as waste in the film industry, city airports, or the City's main recycling facilities. Sometimes, the main speaker was a government or nonprofit representative, for example, from specific areas within the sanitation agency or a representative from the City council dealing with waste. In the period of this study, the challenges of phasing in the rollout of mandatory citywide composting in boroughs based on recent New York City legislation, including outreach and education to the public, was a frequent focus. This refers to changes in the city's planned changes in curbside collection and handling of organics including food waste, which made up 36% of the residential waste stream in 2024 (NYC DSNY, 2023).

Leadership challenges included recurring references to stresses due to the amount of work involved. One chair commented, "It is a lot of work to be true to the reason for the SWAB... it is challenging keeping us pointed in the right direction." For other chairs, the main challenge involved the energy needed to rebuild the borough SWAB following the period when the board was inactive. "Our challenge is a lot of institutional issues—setting up a new board is the biggest part. We have monthly meetings. For a long time, we had difficulty getting a quorum. We were struggling to get participation in the committees." Other structural challenges include problems related to short, two-year term limits that some SWABs allow individuals to serve in the same role. In some cases, chairs felt that they were "just getting acclimated" to the complicated city landscape related to solid waste during that time.

## 2.5 Effectiveness

Each interviewee pointed to a wide range of SWAB outputs and methods used over the years to achieve desired outcomes related to public understanding and policy change related to waste and recycling. The influence of citizen members on the direction of city solid waste policy, away from an emphasis on concerns about waste-to-energy facility placement towards a more comprehensive approach to recycling and other waste-handling methods, was affirmed in current interviews. One interviewee recalled that the substantial funding groups originally were given of \$100,000 in the years following their formation in the late 1980s was focused on allowing the groups to hire a consultant to read the environmental impact statement on solid waste incinerators. However, the Manhattan CAC "went off in a new direction," strengthening the effort to increase attention to recycling and waste prevention.

During the early years of operation, members of the Manhattan Citizen's Advisory Committee (CAC) and subsequent Manhattan Solid Waste Advisory Committee (SWAB) engaged in deliberations, with contention concerning appropriate goals of recycling versus waste to energy, with differing opinions among members, who included diverse representatives including active environmental groups such as New York Public Interest Research Group (NYPIRG) and the Environmental Defense Fund. The Chair played an important mediating role, working closely with the Borough President, the Office of the Mayor, and Sanitation officials with ongoing discussions to help reduce conflict regarding opposing views about waste policy. Issues shared in meetings during that period helped inform sanitation agencies and elected officials about the city process and solid waste management goals. The group collaborated with consultants, and the City's waste plan in the early 1990s reflects the incorporation of some group proposals [10] (Clarke et al., 1999). One interviewee recalled that:

All of the SWABS, CRABS, EDF, NRDC, and Barry Commoner put together a plan in 1991—we had a technical working group meeting with the Borough President's office. In the last meeting, we got down to five scenarios—one was recycling, and the other was 68% incineration. Steve Pollen, the Sanitation commissioner said they were choosing the 68% --we went wild...We all met at EDF and wrote out our own plan, the Recycle First Plan, and a lot of it was still useful.

Seadon (2006) documents the group's advocacy to influence not only the 1988 integrated solid waste plan, board rejection of the 12 alternative proposals put forward by the City for waste management in 1992, and continued advocacy for increased emphasis on recycling. Their role helped to move the City towards reaching a peak in the recycling rate of 20% by 2002, levels which later declined slightly despite ongoing efforts by both the board and City to mitigate various factors including budget cuts. As of 2024, the recycling rate in New York City is 17% (Grow NYC, 2024).

In the year before this study, interviews reveal that the influence of the board members on contributions to the state solid plan continued:

We managed to get a few of us working extremely hard. We read it and saw the meat of it was about thirty pages. It had tables with goals and actions. After we were done, it was 120 pages. We strengthened everything. Originally, for example, they had when action items would start but never included when the action items would finish. After we ended, we had a real state plan. We had 120 pages of initiatives that were better written. We added real citations.

Concerning the Manhattan SWAB, a range of other policy accomplishments included the work of the Waste Prevention Committee in the 1990s on environmental procurement legislation that became Local Law 509 of 1995. During that period, according to one respondent, members of the SWAB also provided foundational work on two major bills, "we had to get things voted on in committees—we were testifying and asking for budget allocations. By 1999—two groups got together, and we created an Inter-SWAB Waste Prevention Committee". The Manhattan SWAB also organized a conference called "*Damming the Waste Stream*," which was part of five years during which "we were going strong." They helped with the formation of a New York City Waste Prevention Committee and in 2004, the Manhattan SWAB launched a collaboration with several environmental organizations and wrote a *Reaching for Zero Waste Plan*—the City caught on, and they started the zero waste to landfill initiative, and we said no—zero waste to disposal."

With respect to outputs such as reports, the Manhattan SWAB was described as "prolific," producing a variety of fact sheets, guides, case studies and publications on a wide range of issues including composting, climate change and waste, reuse, engaging residents in organics, zero waste, waste reduction in multifamily buildings and the Green New Deal. A wide range of these materials for education of the public are available in the organization's website. In the period coinciding with the closure of the major landfill in New York City, members co-authored a report entitled "*Good Bye Fresh Kills*." In the mid 2000's when drafts of the government solid waste plan came out, one interviewee recalled, "But we did not see waste prevention there at all. In 2005, Bloomberg (New York City Mayor) was getting rid of land-based transfer stations—at one point, Bloomberg was trying to get rid of recycling, and the group put in all kinds of testimony, we worked with the council, and they reinstated paper and metals". Other SWABS also produced significant reports relevant to the issues of education the public in their boroughs about waste, with the Queens SWAB producing a 2021 report concerning the "*State of Waste In Queens*" synthesizing waste management concerns for the borough and outlining recommendations of how the borough might help move towards the 2030 zero waste goal (Vick, 2021).



Other SWABs also identified success with outreach, particularly recent work to facilitate the city movement towards increasing composting and organics rollout. The Brooklyn Swab organized a survey and series of meetings with community boards, entitled community board roundtables. Continuing this type of community board outreach was essential according to current interviews. One chair comments on outreach activities, "Eventually, I decided not to run for the Executive Committee but just do outreach. This was meant to hear about the common issues of waste, and we heard about a variety of things like rats, pollution, and trash. We did other events in October where we let the community boards know, but it was about setting up space for brown bins related to the composting rollout in the various boroughs." Another set of outreach activities included a SWAB roundtable in coastal areas focused on waste and beach contamination. Many boroughs in New York City contain neighborhoods of diverse racial, class, and ethnic makeup. Thus, efforts to increase representation have involved strategies such as one SWAB holding a series on race and waste, which one interviewee felt was helpful because, "it was nice to get a chance to speak about this head-on."

In addition, the process of SWAB members analyzing policy related to solid waste, coming to positions, sharing testimony, and communicating positions through developing letters are other vital accomplishments of the boards, with one Chair indicating, "It's good work and it is our responsibility. Looking closely at legislation and policy and reflecting so they understand where we stand". One example was the position the Brooklyn SWAB took in 2023, with the board recommending prioritizing local composting over anaerobic digestion. This related to controversies around newer strategies unfolding around handling of the city's food waste. The New York City Department of Environmental Protection has been expanding operations at the wastewater recovery treatment center in Brooklyn from processing not only sludge but also food waste and converting it to renewable natural gas. At the same time, funding for various community composting operations was recently in jeopardy because of potential budget cuts in 2024. It was noted by interviewees that "Local officials were stunned, but that helped to move the needle. It helped deal with other environmental injustices." The Brooklyn SWAB also published a survey in 2021 of wide range of responses political candidates to waste issues prominently on their website. Only one SWAB did not have a website.

### **3. Discussion and Recommendations**

In terms of future and the way forward, recommendations, each respondent mentioned different salient issues in their boroughs and related to their individual needs. For one SWAB, the period of interruption when meetings stopped, and the reconstitution process from the dormancy phase involved overcoming setbacks to board operation and logistics. Thus, continuing to put forward the necessary energy and drive to move the board forward from this stage remains an important goal. The Manhattan SWAB, on the other hand, was described as relatively "robust with monthly meetings," although one challenge that needed continued attention was the problem of too many demands placed on the current Chair. Another area for continued effort noted in various interviews was the need for more robust committees with active participation. There also is a need to continue to struggle for adequate, fair representation and diversity of boards to reflect current borough demographics. One Chair mentioned the continued need to improve the representation of members concerning race, ethnicity, age, and location. As the modality of meetings, Zoom helped keep a broader array of people engaged.

One board hopes to increase focus on issues at the intersection of waste and climate change, and it plans to meet with the mayor's climate representative. Interviewees also proposed that SWABs look towards obtaining formal nonprofit organizational status as 501c3s. In addition to plans for attracting more members, some suggested increasing the focus on school children's awareness of waste reduction, recycling, and composting. In terms of board coordination, another proposal was to experiment with alternative methods of organizing meetings, including moving from reliance on the traditional group online seminar format to attempting member breakout sessions in online meetings to make the gatherings more interactive.

### **4. Conclusion**

Former studies of citizen advisory boards affirm the power of these bodies as a valuable tool for mobilization and influence in critical realms of public policy. Citizen engagement in advisory groups is driven by commitment and passion from participants (Jones, 2021). This analysis affirms the decisive role of board organization and leadership in the specific realm of solid waste. Table 2 shows the summary of findings of organizational characteristics of solid waste advisory boards in this case New York City as it relates to the model of advisory body structure, function, and effectiveness shown in Table 1.

We see the historical evolution of these bodies as they moved from citizen advisory committees to solid waste advisory boards, with long-term, but often intermittent operations influenced by a range of factors including changes in policy. The missions have evolved from the specific focus on planning of waste to energy facilities to broader issues of recycling implementation. The relationship with sponsors, particularly Borough Presidents, is close, although this has varied over the years, continuing to be sensitive to transitions in personalities.

Solid waste advisory board leaders play an essential role in organization, bringing sensitivity and commitment to the broad field of waste management and interests of the community. Increased passion, and knowledge builds over time, fueling energy necessary to meet the role demands. SWAB leadership involves hard work, to sustain the SWABs movement towards New York City's broader aims of a more sustainable solid waste system. However, the ongoing efforts of those managing these groups, and partnership through committees continues to help move a dynamic array of board outputs. Technology, and tools such as organizational learning about structured agenda's have helped these diverse advisory boards continue to survive to deal with variations in political dynamics, transitions, administrative rules, and available resources. Structural aspects of the organization of these boards are sometimes challenging, including permitted terms of those in leadership roles.

This study affirms that ongoing board involvement strengthens leadership preparation. The SWABs generally demonstrate commitment to a wide range of efforts towards public education and outreach related to waste, with some variations in production of reports and public visibility among the boroughs. However, effectiveness with respect to impact on factors including improved policy decisions and citizens' awareness and understanding of the complexity of solid waste management involves navigating complex city policy subsystems, politics, and personalities. Creativity, and innovation help leaders and board members engage in activities related to public outreach, education, and information about solid waste issues aimed to increase understanding and support for government policies. The groups continue to grapple with challenges related to not only representation, diversity but also resources and support. Previous research, such as the work by Jones (2021) on citizens advisory boards, suggests value in increasing resources in areas such as language translation, which might be helpful guidance for these advisory boards given the sizeable foreign-born population in New York. Future research is needed in future years to explore additional areas including membership motivation and perceptions, variations in dynamics of boards focused on waste in other communities and tracking longer-range impact assessment over time.

## Disclosure

The author(s) declare that there are no conflicts of interest that relate to the research, authorship, or publication of this article.

## References

- Applegate, J. S. (1997). Beyond the usual suspects: The use of citizens advisory boards in environmental decision-making. *Ind. LJ*, 73, 903.
- Bai, X. (2007). Industrial ecology and the global impacts of cities. *Journal of Industrial Ecology*, 11, 1–6. <https://doi.org/10.1162/jie.2007.1296>
- Beierle T. (1999) Using social goals to evaluate public participation in environmental decisions. *Policy Studies Review*, 16(3-4), 75-103. <https://doi.org/10.1111/j.1541-1338.1999.tb00879.x>
- Beierle, T. C. (1998). Public participation in environmental decisions: an evaluation framework using social goals. *AgEcon*. <https://doi.org/10.22004/ag.econ.10497>
- Brooklyn Solid Waste Advisory Board (2024, April 29) *About*. <https://www.brooklynswab.org/home>
- Brooklyn Solid Waste Advisory Board (2023, Dec 3) *Mission*. <https://www.brooklynswab.org/about>
- Brooklyn Solid Waste Advisory Board (2023, Dec 3) *Resources*. *2021 Solid Waste Management City Candidate Questionnaire Responses*. <https://www.brooklynswab.org/resources>
- Badger E., Buchanan L. (March 2, 2024) The absurd problem of New York City trash. *The New York Times*. <https://www.nytimes.com/interactive/2024/03/02/upshot/nyc-trash-rules.html>
- Clarke, M. J. (1993). Integrated municipal solid waste planning and decision-making in New York City: The Citizens' Alternative Plan. *Air & Waste*, 43(4), 453-462. <https://doi.org/10.1080/1073161X.1993.10467143>

- Clarke, M. J., Read, A. D., & Phillips, P. S. (1999). Integrated waste management planning and decision-making in New York City. *Resources, Conservation and Recycling*, 26(2), 125-141. [https://doi.org/10.1016/S0921-3449\(99\)00004-X](https://doi.org/10.1016/S0921-3449(99)00004-X)
- Freudenthal, G. D. (2004). *Citizens' Advisory Group on Solid Waste and Department of Environmental Quality Report: Improving solid waste management in Wyoming*.
- Grow NYC (2024) *Recycling facts*. <https://www.grownyc.org/recycling/facts>
- Grimm, N. B., Faeth, S. H., Golubiewski, N. E., Redman, C. L., Wu, J., Bai, X., & Briggs, J. M. (2008). Global change and the ecology of cities. *Science*, 319, 756–760. <https://doi.org/10.1126/science.1150195>
- Halvorsen, K. (2003). Assessing the effects of public participation. *Public Administration Review*, 63(5), 535–543. <https://doi.org/10.1111/1540-6210.00317>
- Hannah, S. B., & Lewis, H. S. (1982). Internal citizen control of locally initiated citizen advisory committees: A case study. *Journal of Voluntary Action Research*, 11(4), 39-52. <https://doi.org/10.1177/089976408201100405>
- Jones, D. (2021). *The beginning of a long conversation: Insights into Hanford Advisory Board members opinions on diversity, language services, and community engagement* [Masters Thesis University of Washington]. University of Washington Digital Archive. [https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/48576/2021\\_Jones\\_Manuscript%20-%20%20djones08%40uw.edu.pdf?sequence=1&isAllowed=y](https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/48576/2021_Jones_Manuscript%20-%20%20djones08%40uw.edu.pdf?sequence=1&isAllowed=y)
- Justia NY Law. (2024) 2006 *New York Code - Functions of The Citizens' Board*. [https://law.justia.com/codes/new-york/2006/new-york-city-administrative-code-new/ad016-318\\_16-318.html](https://law.justia.com/codes/new-york/2006/new-york-city-administrative-code-new/ad016-318_16-318.html)
- Koop, S. H., & van Leeuwen, C. J. (2017). The challenges of water, waste and climate change in cities. *Environment, development and sustainability*, 19(2), 385-418. <https://doi.org/10.1007/s10668-016-9760-4>
- Lamkey, E. R. (1963). *Organization and use of Citizens' Advisory Committees*. [Master's thesis. Eastern Illinois University] Plan B Papers. 245. [https://thekeep.eiu.edu/plan\\_b/245](https://thekeep.eiu.edu/plan_b/245)
- Lynn, F. M., & Busenberg, G. J. (1995). Citizen advisory committees and environmental policy: What we know, what's left to discover. *Risk Analysis*, 15(2), 147-162. <https://doi.org/10.1111/j.1539-6924.1995.tb00309.x>
- Manhattan Solid Waste Advisory Board (n.d.) *Who we are*. <https://www.manhattanswab.org/who-we-are>
- Office of the Bronx Borough President (2021, April 14) *Borough President Diaz reinstates Bronx Solid Waste Advisory Board (SWAB)*. <https://bronxboropres.nyc.gov/2021/04/14/borough-president-diaz-reinstates-bronx-solid-waste-advisory-board-swab/>
- New York City Mayors Office of Sustainability (n.d.) *Zero waste challenge*. #ONE NYC <https://www.nyc.gov/assets/sustainability/downloads/pdf/Mayor's%20Zero%20Waste%20Challenge%20Final%20Report%20July%202016%20wo%20participant%20info.pdf>
- New York City Department of Sanitation (2023) *2023 NYC Waste characterization study*. <https://www.nyc.gov/assets/dsny/downloads/resources/reports/waste-characterization-studies/2023/wcs-2023.pdf>
- Queens Solid Waste Advisory Board (n.d.) *About us*. <https://queensswab.nyc/>
- Queens Solid Waste Advisory Board. (April 28, 2021) *State of waste in Queens Report*. <https://queensswab.nyc/state-of-waste-in-queens-report/>
- Quinn M. (2022, Sept 21) Council hearing features ideas to boost New York City's stagnant diversion rate. *Waste Dive*. <https://www.wastedive.com/news/new-york-city-recycling-diversion-organics-zero-waste/632323/>
- Rebori, M. K. (2011). Citizen advisory boards and their influence on local decision-makers. *Community Development*, 42(1), 84-96. <https://doi.org/10.1080/15575330.2010.505294>
- Seadon, J. K. (2006). Integrated waste management—Looking beyond the solid waste horizon. *Waste management*, 26(12), 1327-1336. <https://doi.org/10.1016/j.wasman.2006.04.009>
- Santos, S. L., & Chess, C. (2003). Evaluating citizen advisory boards: The importance of theory and participant-based criteria and practical implications. *Risk Analysis: An International Journal*, 23(2), 269-279. <https://doi.org/10.1111/1539-6924.0030>

- Smith, T. B. (1977). Advisory committees in the public policy process. *International Review of Administrative Sciences*, 43(2), 153-166. <https://doi.org/10.1177/002085237704300210>
- Vick R. (2021, May 25) Queens waste committee lays out plan for zero waste future. *Queens Daily Eagle*. [https://queenseagle.com/all/queens-waste-committee-lays-out-plan-for-zero-waste-future#google\\_vignette](https://queenseagle.com/all/queens-waste-committee-lays-out-plan-for-zero-waste-future#google_vignette)
- World Population Review (2024) *New York cities by population 2024*. <https://worldpopulationreview.com/states/cities/new-york>
- Zeiss, C. (1994). Impact screening of solid waste management facilities with stepmatrix-reverse network method. *Environmental Impact Assessment Review*, 14(1), 11-35. [https://doi.org/10.1016/0195-9255\(94\)90040-X](https://doi.org/10.1016/0195-9255(94)90040-X)

**Table 1*****Solid Waste Citizen Advisory Body Alternatives Model***


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<b><u>STRUCTURE</u></b>	
<b>Labels</b>	Board/Committee/Council/Task Force
<b>Charge/Mission:</b>	Substantive/Limited/Specific Broad/Thematic/ Statute/Discretion
<b>Sponsor(s)</b>	Type: Government (National/Federal/State/City/County/Subcounty) Relationship: Close/Distant/Evolving
<b>Representation</b>	Diverse//Limited Govt appointed/Public or Citizen body appt/Self-appointed
<b>Composition</b>	Type: Government / Private sector/Waste Industry/ Citizens/Residents/Academia/Env Nonprofits/Advocates
<b><u>FUNCTION</u></b>	
<b>Period:</b>	Short/ Long Specific/ Indefinite Continual/Intermittent
<b>Leadership:</b>	Experience/Attitudes/Challenges Sponsor appt/Member (appointed/elected)
<b>Participation</b>	High/Medium/Low/ Consistent/Irregular
<b>Resources</b>	Level: High/Low/None Type: Govt/Foundation/ Public/ Self-Funded/ None/ One time/Ongoing
<b><u>EFFECTIVENESS</u></b>	
<b>Outcomes</b>	Substantive/Social goals
<b>Outputs</b>	Reports/policy proposals, plans/public info/ engagement activities/ /media activities

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Table 2

*Key Findings: New York City Solid Waste Advisory Body Model*


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<b><u>STRUCTURE</u></b>	
<b>Labels</b>	Transition advisory committee to board
<b>Charge/Mission:</b>	Transition from specific to thematic Statute with some discretion
<b>Sponsor(s)</b>	Government: Subcounty—Borough President Relationship: Close/Evolving
<b>Representation</b>	Varies from limited to diverse Gov't appointed with citizen applications
<b>Composition</b>	Type: Government / Private sector/Waste Industry/ Citizens/Residents/ Nonprofits/Advocates
<b><u>FUNCTION</u></b>	
<b>Time Period:</b>	Long/Indefinite One SWAB continual/One stopped/ Others intermittent
<b>Leadership:</b>	Experience: Solid waste /env and previous board involvement Attitudes: Passionate/committed Challenges: Membership participation levels, representation, level of work, navigating policy subsystems Sponsor appt
<b>Participation</b>	Varies from consistent/Irregular
<b>Resources</b>	Moved from high to low Type: Varied from gov't to foundation/nonprofit / Self-funded One-time/Ongoing in certain periods
<b><u>EFFECTIVENESS</u></b>	
<b>Outcomes</b>	Social goals (increased outreach/public ed, public preference reflected in decisions, improved decision quality, some reduction stakeholder conflict/cost-effectiveness not measured
<b>Outputs</b>	Evidence of reports/policy proposals, changed plans/public info/ engagement activities/
<b>Resources</b>	Level: By SWAB, borough, time period varied high to none Type: Varied from gov't to foundation/ Public/ Self-Funded/ Varied from one time to periods of ongoing

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