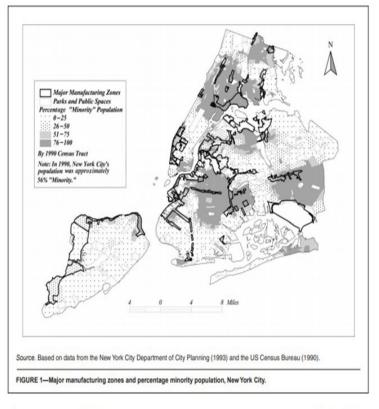
# **WASTE IMPACTS**



Source: Queens SWAB Member

The negative impacts of industry — including waste management — on communities informed the country's earliest zoning laws.<sup>1</sup> More recently, experts have confirmed that large-scale waste-handling, transfer, and processing, when conducted near residential communities, is not only a nuisance as defined by land use law but a source of public health and environmental harm.<sup>2</sup> Such facilities have historically been placed and continue to operate in Black and Brown (BIPOC) communities. This pattern of waste inequity and environmental racism has increasingly become a rallying cry about the burdens of waste on a select few and an appeal to the general public to consider the end result of their personal waste output.

In this section, we explore how waste affects Queens residents. We start by discussing the results of a waste impact survey developed by the QSWAB Organizing Committee and administered to 460 respondents across the borough. We next review a second, in-person survey, examining how waste affects a narrower group: Queens residents who live or work near three distinct types of waste facilities. Finally, we delve into the history of two separate but related waste equity fights waged for decades in the borough, one in CD5 related to waste-by-rail, the other in CD12 focused on waste transfer stations.



1034 American Journal of Public Health

July 2001, Vol. 91, No. 7

Source: American Journal of Public Health

### **Waste Impact Surveys**

### State of Waste in Queens Community Survey

To understand how Queens residents view waste's impact on their lives, the QSWAB Organizing Committee created a 12-item online survey shared via email, newsletter, and social media (10/9/20-10/24/20). The survey was completed by people from all 14 Queens Community Districts. Because Queens is linguistically diverse, the survey was made available in English, Spanish, and Mandarin. In the final days before the survey closed, we received an influx of responses from Astoria after a neighborhood FSDO shared a link on social media. To ensure results were not skewed by these last-minute entries, we controlled for that in our analyses. Below are key findings from representative questions.

- Respondents were asked to rate on a scale of 1
   (least) to 4 (most) the changes they most wanted
   made to waste management in their neighborhoods
   to make it more convenient. By a wide margin,
   respondents wanted more trash cans and recycling
   bins in busy areas (e.g. street corners, plazas,
   parks, restaurants as drop-off sites, etc.) (74%),
   followed by more organic (food scrap, yard waste)
   drop-off sites closer to where they lived (65%).
   Less urgently, people felt their neighborhoods
   would benefit from more bulk waste drop-off sites
   or places to dispose of large items like couches and
   mattresses (46%).
- Among the waste issues respondents felt most negatively impacted them were litter at street corners or in public spaces (83%), litter outside buildings (63%), and lack of conveniently located organic drop-off sites (64%). The concerns they felt Queens most urgently needed to resolve mirrored the responses above (i.e., public litter: 68%; inconvenient location or lack of organic waste collection sites: 46%). Many also felt more public

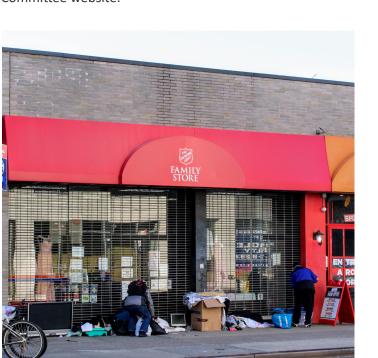
- education about recycling, waste disposal, and composting would be beneficial (44%).
- Over half of respondents said they Disagreed (44%)
  or Strongly Disagreed (18%) with the statement
  that there were enough places to dispose of waste
  on their block. The question did not query about
  block density or typology, (i.e. primarily residential
  or commercial).
- Of nearly 300 individuals who answered a question about knowledge of local waste-related resources, 64% were aware of a community-based organization (CBO) while 4% were aware of a Waste-Related School Program. Only 18% were aware of two resources (i.e., CBO and Local Business: 14%; CBO and Waste-Related School Program: 4%). Five respondents (1%) were aware of all three resources (CBO, Local Business, Waste-Related School Program). Six percent did not know of any waste-related resources.
- When asked to identify waste-related resources by name, the ones most frequently cited included Astoria Pug, Big Reuse, Smiling Hogshead Ranch, Jackson Heights Beautification Group and Greenmarket, Ozone Park Civic Association, Proud Astorian, Queens Botanical Garden, Queens County Farm, Socrates Sculpture Park, and Woodside/Sunnyside Composting.

### **Queens Waste Facilities' Impact Survey**

The second survey administered by the QSWAB Organizing Committee was done in-person with a smaller group of Queens residents who live or work near three of the borough's waste-collection facilities:

- Salvation Army Donation Center: 34-02 Steinway Street, Astoria, NY 11101
- American Recycling Management and Regal Recycling (solid waste transfer stations): 172-33 Douglas Avenue, Jamaica, NY 11433
- DSNY Non-Permitted Waste Transfer Site near 19525 69th Avenue, Fresh Meadows, NY 11365

Given the small participation rate, we consider these responses anecdotal until more data can be collected. Respondents were asked the same questions at each location. Respondent demographics and detailed survey responses are available on the QSWAB Organizing Committee website.



Source: Queens SWAB Organizing Committee member

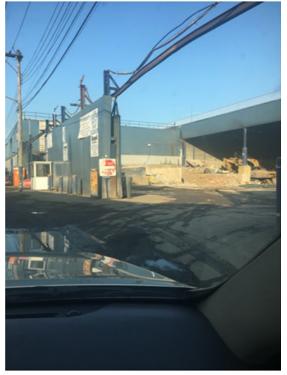
In the future, the QSWAB Organizing Committee hopes to survey Queens residents living near the following additional waste collection facilities:

- Rockaway Community Park at Conch Pl. &, Edgemere Park Rd, Far Rockaway, NY 11691
- Community Beverage Redemption Center (bottle bill redemption center) at 53-01 80th Street, Elmhurst, NY, 11373
- Durante Brothers NYC (construction debris processing) at 31-40 123rd Street, Queens, NY, 11354.

### **Salvation Army Donation Center** — 16 Respondents

The Salvation Army Donation Center accepts textiles, home goods, and books that would typically go to landfills or be re-sold. Because the center lacks a dedicated outdoor donation bin, bags are often left on the curb, regardless of weather. It is not uncommon to see people searching through bags to find items they want.

Half of respondents felt the donation center was well-placed in the community, with 63% stating they visited it at least once a year. Eighty-one percent described the center as somewhat or definitely clean. Sixty-three percent said traffic around the facility did not negatively impact them. Sixty-nine percent said the facility was somewhat beneficial to the community. Concerns about the facility included lack of outdoor donation bins, items left outdoors when the store is closed, and lack of clear directions about donation procedures. Overall, respondents had positive views about the Salvation Army Donation Center.



**Regal Recycling**Source: Queens SWAB Organizing Committee Member

## American Recycling Management and Regal Recycling Solid Waste Transfer Stations $-\ 11$ Respondents

Residents, many of them living within a five-block radius of the American Recycling Management and Regal Recycling solid waste transfer stations in Jamaica, held a decidedly more negative view of these facilities. Eighty-two percent described them as unclean, with the same percent stating traffic around the facilities negatively impacted them. More than half (55%) said the facilities provided no community benefits. Many felt the waste transfer stations did not belong in a residential neighborhood and should be enclosed. Complaints about the facilities included noise that disrupts sleep, noxious smells, and dust that irritates eyes and causes difficulty breathing attributed to waste-hauling trucks traveling on unpaved roads.



American Recycling
Source: Queens SWAB Organizing Committee Member

### **DSNY Non-Permitted Waste Dump Site** — 4 Respondents

The site is located behind the parking lot of a supermarket and laundromat. The site sits adjacent to a large residential housing complex.

Despite a low response rate at this location, all participants agreed that the site was ill-placed and dirty. **Seventy-five percent said traffic around the site negatively impacted them and that the site provided no community benefits**. Resoundingly, residents felt the site should not be located near a residential area.



Source: Queens SWAB Organizing Committee member

### **Waste Impact Case Studies**

The case studies below look more closely at waste impacts on two Queens Community Districts where waste challenges have been long-standing: CD5 and CD12. These case studies were prepared by community advocates who have deep histories in these respective communities and who have been personally affected by the conditions described.

## A Win for Waste Equity but the War is not Over

After Fresh Kills Landfill — New York City's final remaining landfill — closed in 2001, the City lacked a comprehensive plan to handle how waste would be transferred from collection sites to landfills across New York State and around the country. In response, the Department of Land Use and City Planning, along with the Department of Environmental Conservation, permitted the siting of waste transfer stations (WTS) near homes, parks, and schools in predominantly BIPOC communities where waste could be sorted prior to export, with waste arriving by truck and being later exported through a combination of larger trucks, trains, and barges. Today over 75% of the City's solid waste is processed in three of these communities: the South Bronx, North Brooklyn, and Southeast Queens, primarily Jamaica.3

For residents of Southeast Queens (CD12), this has meant living beside private WTS that handle not only municipal waste but also commercial waste from the City's hotels, offices, and restaurants. Each day, these WTS service thousands of diesel trucks operated by small haulers. As of 2019, they accepted an average of 1,700 tons of waste per day, 660 fewer tons than the 2,240 for which they are permitted, but still a large amount when co-located near residences.<sup>4</sup>

Because waste transfer stations are considered a 'heavy industrial' use, they are required by zoning law to be located in M3 Manufacturing Zones.<sup>5</sup> **The WTS in CD12, however, are in an M1 'light manufacturing' zone next to residential properties, having been "grandfathered in" decades earlier**. As a result, people who live near the facilities are exposed to high levels of particulate matter, dust, emissions, exhaust, and litter. Pollution harms quality-of-life in any community, but even more so in low-income neighborhoods where residents may lack the means or resources to improve their physical surroundings.

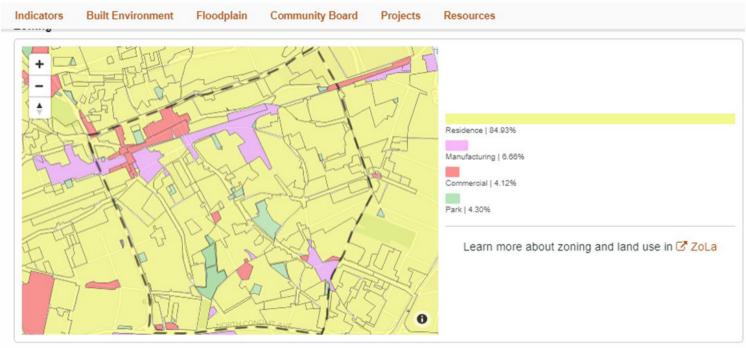
Particulate matter from WTS, combined with incoming diesel truck exhaust and gas emissions, creates air pollution that is correlated with respiratory diseases, including asthma.<sup>6</sup> Most recently, pre-existing respiratory conditions were found to be a contributing factor to more severe COVID-19 reactions and higher mortality rates in neighborhoods such as Jamaica.<sup>7</sup>

In response to the impacts of WTS on their communities, civic and faith leaders in Southeast Queens worked for decades with their counterparts in the South Bronx and North Brooklyn to persuade the New York City Council to enact waste equity legislation to reduce the allowed capacity of waste at these WTS.<sup>8</sup> Residents' testimonies included community data that quantified environmental burdens, including 80 trucks per hour and air-quality monitoring information showing particulate levels three times higher than the City average.<sup>9</sup> Despite strenuous industry push back and multiple court battles, the Waste Equity Law passed in 2018 has since been upheld.<sup>10</sup>

A year later, the NYCC took a further step to reduce negative harms from WTS by introducing a Commercial Waste Zone (CWZ) bill. CWZs divide the City into geographic areas and use a competitive bidding process to limit the number of private carters that can service each one. The law aims to "create a safe and efficient collection system that provides high-quality service and reduces the harmful environmental impacts of the trade waste industry in New York City." 11

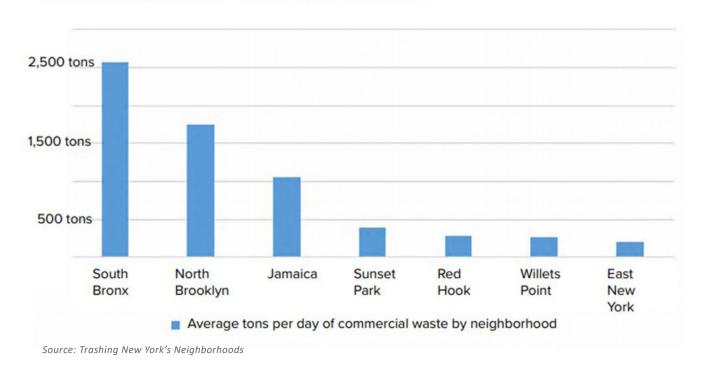
Neither the Waste Equity Law nor CWZs, however, mandate enhanced standards at existing WTS nor enforcement of ongoing adverse community impacts. Currently, for example, CD12 remains the only Community District with unenclosed construction, demolition, and scrap metal transfer stations in an M1 zone<sup>12</sup> in New York City and residents continue to fight to have their concerns not only heard but addressed.

### **Queens Community District 12**



Source: City Planning, Community Profiles: Queens Community District 12

#### TRANSFORM DON'T TRASH NYC REPORT — TRASHING NEW YORK'S NEIGHBORHOODS



## Civic Group Raises the Red Flag About Waste-by-Rail Impacts

The closing of Fresh Kills Landfill in 2001 — and transition to some local waste being exported on trains and barges from NYC to distant landfills instead of exported by trucks — was supposed to reduce negative health and environmental impacts on New York City's residents. But as New Yorkers discovered, exporting waste by rail and barge was not the panacea they had been promised.

For decades, in fact, residents in Queens Community Districts 2, 5, 9, 12, and 13 — supported since 2009 by the nonprofit Civics United for Community Railroad Environmental Solutions (C.U.R.E.S.) — have raised the red flag about noise, toxic emissions, debris, waste blow-off, leachate, and odors caused by the New York & Atlantic Railway's high-polluting 1970's diesel locomotives hauling residential and construction and demolition waste on tracks and in rail yards owned by the Metropolitan Transit Authority-Long Island Rail Road (MTA-LIRR).

These problems were predicted and preventable.

In 1997, in advance of Fresh Kills' closing, and with the knowledge that waste-by-rail was on the horizon, Queens Borough President Claire Shulman negotiated a contract with the MTA-LIRR and New York and Atlantic, requiring them to ensure waste rail cars traveling through Queens would be properly sealed and move without delay.<sup>13</sup> When the NYC Corporation Counsel ruled that Shulman lacked authority to broker a contract, however, the agreement was nullified. Once permits were approved, the environmental problems Shulman predicted came to pass.

Resolving waste-by-rail's externalities is complex, a byproduct of legal loopholes, multiple jurisdictions, oversight, and long-standing legal maneuvers that have given the rail industry the upper hand when it comes to regulations. The Federal government's 1963 Clean Air Act, for example, allowed 1970's locomotives to be excluded, resulting in ongoing excessive pollution from these locomotives. Also, railroads are allowed to decide for themselves what the containment standards will be for waste hauling. For New York State residents who live near freight rail lines, this has meant enduring public health and environmental harms to this day.

Multiple, overlapping jurisdictions have resulted in lack of uniform standards for waste-by-rail, even as it proliferates. For example, in DEC Region 2 (New York City), DSNY's contracted hauler, Waste Management, uses sealed rail containers to carry municipal solid waste and replaced a 1970s locomotive with one that has near-zero emissions to mitigate environmental harm.<sup>14</sup> Meanwhile, in DEC Region 1 (Nassau and Suffolk County), companies continue using 1970's locomotives and open rail cars to ship construction and demolition waste across the two regions.<sup>15</sup>

In another example, Tunnel Hill Partners, which owns a rail transfer station in DEC Region 1's jurisdiction (Farmingdale Yard in Suffolk County) ships construction and demolition waste in open rail cars, while its "transload" facility in DEC Region 2 (Oak Point Yard in the Bronx) ships in sealed rail containers under a DSNY permit.

DEC Region 1 also continues permitting new waste transfer stations as applications from private companies are submitted, without regard to their cumulative impacts on the freight rail capacity of Fresh Pond Yard in CD5 or the health and well-being of residents, including those in Environmental Justice communities who live up and down the rail line. In addition to DEC's proliferation of WTCs, NYC's Waste Equity Law LL 152 offers a tonnage increase for direct rail export.

As the only remaining freight rail hub where intercounty rail cars can be "switched" and "classified" (i.e., arranged prior to long-haul pick-up), the Fresh Pond rail yard plays a critical role in long-haul waste export, with all waste-by-rail arriving from Kings, Queens, Nassau, and Suffolk counties passing through this 10-acre bottleneck. The New York Metropolitan Transportation Council's Regional Transportation Plan, scheduled for release in June 2021, includes a "supply chain" section that addresses waste movement and includes recommendations linked to long-term forecasts that assume even more waste traveling through the region in coming decades. 16 According to public health experts who have studied communities like those in Queens that exist in the shadow of freight rail, locomotives would need to reach zero emissions, as Waste Management's locomotive does, to protect public welfare.17

In 2015, Waste Management used a U.S. EPA grant initiated by DSNY and the New York City Economic Development Corporation to purchase a near-zero emissions locomotive, considered an industry standard. The locomotive uses 40% less fuel and yields a 99% (19.4 tons) annual reduction in nitrogen oxide (NO) — a known by-product of diesel engines linked to respiratory illnesses — and a 99% (.48 tons) reduction in particulate matter linked to cardiovascular and respiratory illness. C.U.R.E.S. advocated for that grant and for another \$27M in NYS appropriations — \$3M in funding every year since 2013 — that can be used to repower wastecarting locomotives to Tier 4 standards to ensure cleaner air.<sup>18</sup> C.U.R.E.S. also helped get containment legislation passed in the NYS Senate and U.S. House of Representatives.<sup>19</sup>

Despite these efforts, the adverse impacts QBP Shulman tried to prevent in 1997 have only increased in the intervening decades, as agencies continue issuing new WTS permits and the tonnage of waste exported continues growing without sufficient planning, public protections, or oversight.



**Tunnel Hill Partners Rail Gondolas**Source: QSWAB Organizing Committee Member

#### New York City's far-flung trash

The Big Apple ships much of its residential, commercial and construction waste to out-of-state dumps, some as far away as Ohio and South Carolina.



Source: New York Department of Environmental Conservation

Source: Politico, 1/5/2020, NY Department of Environmental Conservation

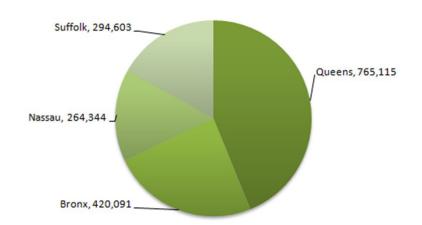


Fresh Pond Rail Yard Source: Google Earth



Source: Zhi Keng He and C.U.R.E.S.

The map above shows today's regional waste-by-rail landscape, highlighting the current configuration of freight rail lines and also existing and proposed waste transfer stations (WTS) that could soon open to handle the massive amount of new waste Queens could see after the Brookhaven Landfill on Long Island closes in 2024.<sup>20</sup> The yellow zone represents neighborhoods within one kilometer of the line, those most impacted by pollution. This area includes over 750,000 Queens residents and another one million in Bronx, Nassau, and Suffolk counties. Waste-by-rail currently comprises a third of Long Island's annual freight activity and is likely to grow exponentially in coming years.<sup>21</sup>



### Regional Population Impacted by C&D Waste-by-Rail

Source: ArcGIS analysis with population based on American Community Survey 2014-18 data. Impact estimate based on 2014 research by Andrea Hricko conducted in similar communities in California.<sup>22</sup>

# Conclusion

Negative waste impacts happen from the moment Refuse, MGPC, Paper, or Organics are tossed on streets or put in bins. These impacts continue throughout waste being transported, sorted, processed, landfilled, or incinerated.

For decades, community activists have raised awareness about the burdens of managing New York City's now 3.2M-plus tons of annual waste on environmental justice communities. In the case of waste-by-rail, some have taken legal action against the City and its export affiliates to stop these harmful impacts.<sup>23</sup> Yet so long as jurisdictional oversight remains siloed and source reduction efforts stop at city rather than regional or inter-state boundaries, New York City's waste will continue causing harm well beyond our five boroughs.<sup>24</sup>

Through broad and focused surveys, Queens residents told us how waste impacts them:

- Residents are most negatively affected by litter on their streets and want opportunities to divert organic materials through more food scrap drop-off sites. They also want clearer directions about how to recycle and divert.
- Due to active community engagement following COVID-19 DSNY budget cuts, Queens residents know about local resources that support their diversion goals, but fewer are familiar with zero-waste and sustainable businesses or school programs like Zero Waste Pledge or Race Against Waste that involve younger people.
- When waste facilities provide a community benefit, such as a place to donate goods, Queens residents appreciate these facilities. When facilities handle noxious materials, and if proper covering is not provided to control odors, dust, and run-off, their presence in residential neighborhoods is understandably unwelcome.
- Waste Equity and Community Waste Zone legislation were aimed at reducing community harms from waste management. But while these laws address local truck traffic in some communities, if not properly monitored overall, they simply move impacts from one neighborhood to another.

#### **ENDNOTES**

- 1 "Zoning, Equity, and Public Health." Juliana Maantay, PhD, MUP. American Journal of Public Health. July 2001, Vol. 91, No. 7. https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.91.7.1033.
- 2 Ibid.
- 3 Gannon, Michael. "Jamaica march backs trash zone legislation." Queens Chronicle. Accessed 12 September 2019.
- https://www.qchron.com/editions/eastern/jamaica-march-backs-trash-zone-legislation/article\_d104b88a-900c-5ca6-88eb-69126a6c9da8.html.
- 4 "Waste Equity Law." DSNY https://www1.nyc.gov/assets/dsny/site/resources/reports/waste-equity-law. Accessed 5 April 2021.
- 5 "Manufacturing Districts." NYC Planning. https://www1.nyc.gov/site/planning/zoning/districts-tools/m3.page. Accessed 6 March 2021.
- 6 "Health and Environmental Effects of Particulate Matter (PM)." EPA, Environmental Protection Agency, 13 Apr. 2020, www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm. Accessed 12 April 2021.
- 7 "New York City Covid Map and Case Count." The New York Times, 09 May 2020. https://www.nytimes.com/interactive/2020/nyregion/new-york-city-coronavirus-cases.html. Accessed Nov 2020.
- 8 "A 'People-Powered Initiative': The History of Waste Equity Policy in New York." New York Lawyers for the Public Interest, 1 Aug. 2019, www. nylpi.org/a-people-powered-initiative-the-history-of-waste-equity-policy-in-new-york/. Accessed 12 April 2021.
- Scarborough, Andrea. New York City Council, Committee on Sanitation and Solid Waste Management. Hearing on Commercial Waste Zones, Hearing, p. 91-92, 27 Jun 2019. New York City: City Council, 2019.
  - https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=3963901&GUID=6D5F166D-1834-4EDD-BF64-DA5D1DD88C61&Options=&Search=.
- Sandoval, Gabriel. "Trash Transfer Station Slimdown for Overwhelmed Neighborhoods Get Appeals Court OK." The City, 17 December 2020.
- https://www.thecity.nyc/environment/2020/12/17/22188128/trash-transfer-station-slimdown-get-appeals-court-ok. Accessed 6 March 2021.
- New York City Council, Committee on Sanitation and Solid Waste Management. Text Int. No. 1574-A, https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=3963901&GUID=6D5F166D-1834-4EDD-BF64-DA5D1DD88C61&Options=&Search=.
- "Manufacturing Districts: M1." Zoning: Districts Guide -Manufacturing Districts M1 DCP, NYC Department of City Planning, 21 Apr. 2021, www1.nyc.gov/site/planning/zoning/districts-tools/m1.page.
- Bertrand, Donald. "Deal KOs Waste Transfers." New York Daily News, 11 Mar 1997.
- Winslow, Olivia. "LI Planning council attendees agree solid waste disposal a 'looming crisis.'" Newsday, 27 Feb 2020, https://www.newsday.com/long-island/environment/brookhaven-landfill-1.42276278. Accessed 10 Nov 2020.
- Waszynski, Randall, "Winters Bros. wants to move waste by rail." The Long Island Advance, 12 Nov 2020, https://www.longislandadvance. net/stories/winters-bros-wants-to-move-waste-by-rail,86966?fbclid=IwAR0LyeOCorx29GNtRQuLsdNbyWgVmD9PkJpJHmUwbx3to4rCeWMw633y 7UQ#.X7CEuIvpPPE.facebook. Accessed 16 Nov 2020.
- 16 California Air Resources Board, "CARB Petitions U.S. EPA to Strengthen Locomotive Emission Standards." 13 Apr 2017, https://ww2.arb.ca.gov/sites/default/files/2020-07/final\_locomotive\_petition\_and\_cover\_letter\_4\_3\_17.pdf.
- 17 Ibid
- "New York City Locomotive Repowers: Collaborative Efforts to Improve Air Quality." United States Environmental Protection Agency Ports Initiative, https://www.epa.gov/ports-initiative/new-york-city-locomotive-repowers-collaborative-efforts-improve-air-quality. Accessed 10 Nov 2020.
- 19 NYS DEC Region 1 includes Nassau and Suffolk counties Long Island.
- New York Metropolitan Transport Council https://www.nymtc.org/Required-Planning-Products/Regional-Transportation-Plan-RTP. Accessed 24 March 2021.
- "Hevesi and Environmental Coalition Secure \$3 Million to Overhaul Freight Locomotives." New York State Assembly, 7 Apr 2015, https://nyassembly.gov/mem/Andrew-Hevesi/story/63346. Accessed 11 Nov 2020.
- "Meng Legislation to require covers on trains -- including those negatively impacting communities in Queens -- passed by House as part of key transportation and infrastructure bill." Congresswoman Grace Meng, 1 July 2020, https://meng.house.gov/media-center/press-releases/meng-legislation-to-require-covers-on-trains-including-those-negatively. Press Release. Accessed 11 Nov 2020.
- Crunden, E.A. "Waste Management Expected to Pay \$2.3M in New York Landfill Settlement." Waste Dive, 21 July 2020, www.wastedive.com/news/waste-management-settlement-2-million-high-acres-landfill-ny/581781/
- Steve Orr. "New York City should take responsibility for community impact of its trash, lawsuit asserts." Democrat and Chronicle, 20 Dec 2018. https://www.democratandchronicle.com/story/news/2018/12/20/new-york-city-named-defendant-suit-over-high-acres-landfill-odors/2374190002/.