

The City of New York Department of Sanitation



Testimony of John J. Doherty, Commissioner

Hearing on the FY 2015 Preliminary Budget,
Mayor's FY 2014 Preliminary Management Report
and Agency Oversight Hearing
Before the New York City Council Committee on
Sanitation & Solid Waste Management

Wednesday, March 19, 2014 1:30 P.M. City Hall – Committee Room

Good morning Chairman Reynoso and members of the City Council Committee on Sanitation & Solid Waste Management. I am John Doherty, Commissioner of the New York City Department of Sanitation. Before I begin, I would like to personally extend to you my sincere congratulations on your appointment as Chair to this Committee, and to congratulate and welcome the new members serving on this Committee. The Department of Sanitation delivers essential municipal services to the public by keeping New York City clean and safe, and looks forward to working with this Committee on future sanitation-related issues of mutual importance.

I would like to thank you for the opportunity this afternoon to discuss the Department's portion of the Mayor's Fiscal Year 2015 Preliminary Budget, the Mayor's FY 2014 Preliminary Management Report, and our current programs and operations. With me here are Bernard Sullivan, First Deputy Commissioner for Operations, and Larry Cipollina, Deputy Commissioner for Administration and Financial Management, who will join me in answering your questions.

Preliminary FY 2015 Budget

As proposed, the FY 15 Preliminary Budget allocates \$1.48 billion in operating funds to the Department, an increase of 4.1% from our current FY 14 budget of \$1.42 billion, to cover the costs of our cleaning, collection and snow removal operations with no service disruptions, and necessary staffing.

The Department's capital budget proposed for FY 15 is approximately \$119.4 million. Of this, \$7.4 million is allocated to construction-related costs, \$1.0 million for information technology projects, and \$111.1 million to equipment and vehicles that are critical to support our core service mission.

Long Term Solid Waste Planning and Sustainability

Planning for a long-term, sustainable solid waste disposal policy for managing over 12,000 tons of refuse and recyclables generated daily in the City is a top priority of the Department. I am pleased to report to you the Department's accomplishments over the last twelve months to advance the long-term infrastructure of the City's approved Solid Waste Management Plan. As you know, this Plan establishes a more equitable waste management system, and gradually replaces New York City's predominantly truck-based solid waste export system with one that is primarily rail and barge-based.

Construction of both the North Shore MTS in Queens and the Hamilton Avenue MTS in Brooklyn is nearing substantial completion, and both facilities are expected to be ready for operations in FY 15.

Construction of the East 91st Street MTS in Manhattan commenced last Spring, and we expect construction of this facility to be completed in 2016. The Southwest Brooklyn MTS is fully permitted, and DDC has awarded a construction contract. We expect the Southwest Brooklyn MTS to be completed in 2017.

A demolition contract for the existing facilities on the site of the new Gansevoort Street MTS and Environmental Center has been awarded by DDC, and will take approximately 24 months to complete. In the interim, the City will continue working with the State to secure a Memorandum of Understanding being negotiated between the City and the State regarding additional funding for the Hudson River Park Trust.

The Department finalized a 20-year service contract for the use of Waste Management's Review Avenue Transfer Station in Maspeth for the containerization and export by rail for the Queens waste shed formerly served by the Greenpoint MTS. A long-term export agreement was finalized in 2012 with the Port Authority of New York and New Jersey for the use of the Essex Resource Recovery Facility that will receive a portion of Manhattan's waste.

As we continue to advance our SWMP infrastructure, the Department's long term and interim export operations remain ongoing. The FY 15 budget would allocate \$392.1 to cover the costs of

export tipping fees for Department-managed waste under our current interim and long term export operations.

Having a fundamental appreciation for the environment is critical to our long-term solid waste management policy and planning strategies, with recycling being a vital and essential component of the City's integrated solid waste management system. Among cities across the nation whose populations exceed one million residents, New York City operates the most dynamic and complex residential program in the nation. We are the <u>only</u> city that collects recyclables at the curbside from all residents, serving more than 3.2 million households and over 8 million residents across the City, the majority of whom live in large multi-residential buildings and complexes. New York City's residential recycling program is larger in scope and magnitude than any other program of any large city in the United States.

Over the last twelve months I'm proud to highlight the numerous accomplishments we've achieved just over the last twelve months to support and continue our ambitious recycling and sustainability agenda which include:

- Expanding recycling collections to include rigid plastics;
- Adding more public space recycling sites across all five boroughs;
- Piloting a voluntary residential organics curbside collection program pursuant to a local law signed last June which, by next month, we will have expanded to include approximately 100,000 households in nearly two dozen neighborhoods across Brooklyn, the Bronx, Queens and Staten Island, as well as large-scale apartment buildings in Manhattan;
- Expanding our pilot organics collection program to additional public schools in Brooklyn, Manhattan and Staten Island, where the diversion percentage in the participating schools at present has more than doubled, with diversion rates in the Manhattan schools increasing to 34%, and in the Brooklyn schools to 38%;
- Expanding organics and food scrap drop-off points at greenmarkets;
- Working with the Council on legislation restricting the sale and use of expanded polystyrene foam for single service food items in packaging if the Department determines by next January that foam cannot be recycled;
- ▶ Working with the Council on legislation requiring separate organics collection from large-scale food generators by July next year if we determine there is sufficient processing capacity;
- ► Working with the Council on legislative amendments to enhance the City's recycling scavenging law;

- ► Launching "e-cycleNYC", which is the most expansive e-waste collection service provided by any city in North America at no cost to taxpayers;
- Increasing the number of textile and used clothing drop-off sites in buildings and public spaces throughout the City;
- ► Hosting at least one SAFE Disposal event for household hazardous waste in each borough; and
- ▶ Working to improve recycling in areas with low diversion rates and encourage better recycling practices.

I am also pleased to announce that last December the new South Brooklyn Marine Terminal Recyclables Processing Facility, operated by Sims Municipal Recycling of New York, began processing MGP and mixed paper delivered by the Department pursuant to a long-term contract. Most of the material delivered to this new facility, and the processed material that leaves it, will be transported by barge. We would be happy to arrange for you a tour of the new facility whenever your schedule permits.

Clean Air and Energy Highlights

The Department continues to excel in meeting current clean air emissions standards for our entire vehicle fleet, which I am proud to report to you is among the greenest in the United States. In 2013, the Department was a recipient of the Federal EPA Northeast Diesel Collaborative "Breath Easy Leadership Award".

Ninety-nine percent (99%) of the entire DSNY diesel fleet is equipped with the "Best Available" diesel exhaust after-treatment technology. In the current FY 2014, the Department acquired and put into service 18 new pure-electric Nissan Leafs and 23 new CNG-powered Mack collection trucks. Today the Department operates 42 electric vehicles and 44 dedicated CNG refuse trucks. We've also put into service 15 new diesel-powered, production-based hybrid-hydraulic collection trucks, with 32 additional trucks on order. Also in FY 2014, we installed 18 additional "Level II" (220 Volt/30 Amp) Electric Vehicle (EV) chargers at our district facilities citywide. The Department currently has a total of 49 Level II EV chargers to accommodate a growing number of EVs. We operate 766 light-duty hybrid-electric passenger vehicles. We are also now utilizing B20 citywide on a seasonal basis in all of our district facilities from April to November, and from November through March during our winter operations we'll be using B5. The Department is also testing the world's first hybrid-electric street sweepers. Six units are currently under test by the Department today. Improving the fuel efficiency of our medium and heavy-duty fleet will play an important role towards achieving PlaNYC goals.

Vehicle Consolidation

In April, 2012, Executive Order Number 161 was signed consolidating the maintenance

of motor vehicle fleets for New York City agencies. The Department was designated the Center of Excellence for medium and heavy-duty vehicles. Our Bureau of Motor Equipment is now responsible for the repair and maintenance of approximately 5,500 DSNY Department vehicles and 1,150 medium/heavy duty vehicles from the Department of Environmental Protection, Department of Education, Department of Health and Mental Hygiene and NYC Parks Department (partial). As a part of this consolidation, repair facilities in the other City agencies were either closed or re-purposed. This resulted in savings based on greater operating efficiencies and economies of scale, while capitalizing on the Department's expertise and ability.

Street and Public Area Cleanliness

One of the most important missions of the Department is street cleaning. Prior to 1975, there was no systematic way to rate the cleanliness of the City. In 1975, the Fund for the City of New York came up with an idea. The Foundation took pictures of gutters and sidewalks having various amounts of litter. The public was then asked to rate the cleanliness of these areas based on what they viewed in the photographs. The rating system was named Scorecard, and is still practiced today.

In 1975, the Mayor's Office of Operations began to use the system to rate streets and sidewalks throughout the City. The first scorecard rating in 1975 rated the streets as 71.3% acceptably clean. Over the next 20 years, the ratings dropped to a low of 52.9%, with streets being marginally clean in 1980, and by 1994 it rose to 71.5%, just about where it started 20 years earlier. Over the next 19 years, cleanliness of the City rose to 94.5% in FY 2013 – a 32% increase.

Even at 94.5, however, there are still some areas of the City that are rated in the low 80's, and at times during the year those ratings have dropped into the 70's.

Although the Department has come a long way in the last 19 years to improve street cleanliness, there is still more to be done. We have to work together to ensure funding is always in the budget, as it is in this one, to keep the City clean and, in time, provide additional funding to ensure that every community in the City is rated at 95% or better.

The results of Scorecard ratings for each month and fiscal year are displayed on the City's web site, at nyc.gov/Scorecard. This web page also explains the system and shows illustrative photographs for each of the rating scale points.

I have a plaque in my offices that reads "Sanitation is a way of life that is expressed in the clean street. Being a way of life, it must come from within the people". This is something I believe in, and something we must all continually work at to maintain a clean city.

Given this unusually active winter season that is not yet officially over, I would like to share with you our ongoing snow operations. The Department's proposed preliminary snow budget for FY 15 is approximately \$38.2 million. It is anticipated that this figure will be adjusted

in the Executive Budget to reflect the five year average as required by the City Charter, which would increase snow funding for FY 15 to \$60.1 million. The adopted snow budget for FY 14 was \$57.3 million, though the current modified FY 14 snow budget now stands at \$92.3 million. However, this does not include the last two major snowstorms, and therefore we expect to overspend the current modified budget amount by at least another \$35 to \$40 million. The snowfall total for the City during this year's snow season, so far, stands at 56 inches. Also to date during the 2013-2014 snow season, the Department used 491,228 tons of road salt.

In closing, I would like to thank you again for this opportunity today to highlight our current programs and accomplishments, and demonstrate the Department's commitment to environmental stewardship that ensures and promotes a sustainable New York City in the years ahead. I would also like to acknowledge the dedicated men and women of the Department who work each day to keep our City's neighborhoods clean, healthy and safe, oftentimes under difficult circumstances – but that is why they are New York's "Strongest". As the Department continues in its core mission serving the public, we look forward to working with you constructively in a collaborative partnership that helps us meet our challenges, and re-affirms our mutual long-term sustainable policies and objectives.

My staff and I will now be happy to answer your questions.



THE CITY OF NEW YORK BUSINESS INTEGRITY COMMISSION 100 CHURCH STREET, 20TH FLOOR NEW YORK, NEW YORK 10007

Testimony of Jayant Kairam, Chief Operating Officer
of the New York City Business Integrity Commission Before the
Committee on Sanitation and Solid Waste Management of the Council of the City of New York on
the Fiscal Year 2015 Preliminary Budget, and the Mayor's Fiscal Year 2014 Preliminary
Management Report

March 19, 2014

Good afternoon Chair Reynoso and members of the Sanitation and Solid Waste Management Committee. My name is Jay Kairam and I am the Chief Operating Officer of the Business Integrity Commission (BIC). With me today is Deputy Commissioner and Chief of Staff Megan Bacigalupi and Deputy Commissioner and General Counsel Abby Goldenberg. Thank you for inviting me to testify before you today. BIC was previously under the oversight of the Consumer Affairs Committee so we look forward to building a relationship with you Chair and the other members of the Committee.

Agency Overview and Recent Successes

BIC licenses, regulates and oversees the City's commercial waste hauling industry and the businesses that operate in the City's public wholesale markets. The agency's mandate is to make certain these industries are free from organized criminal behavior and corruption, and are able to provide services in an open, competitive and fair environment.

The commercial waste industry is composed of businesses that provide for the removal of commercial trade waste such as putrescible and recyclables, construction & demolition materials, landscaping waste, and other more specialized forms of waste like yellow and brown grease and non-hazardous electronic waste. BIC also registers wholesale food businesses that operate in the city-owned public markets as well as the area adjacent to the Hunts Point Produce Market. These businesses supply

customers in local, national, and international markets. BIC also oversees the shipboard gambling industry, but presently there are no firms licensed to operate in New York.

BIC's core operations revolve around licensing, in-depth intelligence gathering, rigorous legal analysis and ongoing investigation and enforcement of the industries we regulate. We also develop and implement policies designed to further competitive industry growth, increase customer protection, and set meaningful standards of service. We routinely coordinate with other law enforcement entities such as the City's five District Attorneys, the Southern and Eastern Districts of New York, NYCEDC, DSNY and DEP on matters of enforcement, policy and regulation. I will now detail a few of the agency's major accomplishments from the past year.

Major Accomplishments & Initiatives

In response to industry concerns, BIC has sought to proactively address the issue of cardboard theft. Unlawful theft of recyclable materials, which are valuable commodities in some cases, is a behavior that negatively and unfairly impacts the business health of commercial operators and BIC supported the previous Administration and Council's legislation to increase penalties for this illegal activity. The agency has zero tolerance for any type of illegal activity and believes these legislative measures coupled with strong investigative and enforcement action will help stem the tide. For example, this past year we have conducted two major investigations aimed at tackling large-scale cardboard theft schemes in the New York Area City.

First, in September 2013, the Commission denied the license renewal application of Diag Express Trucking, after a lengthy investigation conducted by BIC legal and enforcement staff proved that Diag was engaged in illegal theft of cardboard. Diag reported nearly \$2 million in gross revenue over a two year period, much of which appears to have come from the sale of stolen recyclables. The Commission's denial stripped Diag of the ability to operate in the City, an action that was applauded by the trade waste industry.

Second, a long-term investigation and audit into the activities of Hector Alers, in coordination with the Connecticut State Department of Revenue Services, led directly to his indictment by the Office of the United States Attorney. Alers is set to be tried in June on federal charges of interstate transportation of \$3.8 million in stolen property over a four year period. These investigations as well as a previous long-term investigation involving theft of materials from area big box stores, highlight how the agency has learned to strategically deploy resources, coordinate amongst law enforcement activities across jurisdictions and identify the chokepoints of these illegal operations.

Another standout action from this year was the investigation into the illegal dumping activity of Scaramella Trucking as part of their contract work on the Outerbridge Crossing project in Staten Island. In coordination with the Port Authority of New York and New Jersey's Inspector General, BIC investigators identified that Scaramella was illegally dumping material at sites throughout Staten Island in order to pocket savings from tipping fees. BIC has issued a violation to the company which, after adjudication, may result in a monetary penalty of up to \$470,000.

On the regulatory front, BIC completed a number of initiatives this past year that will improve the transparency and environmental performance of the trade waste industry. In addition to active support and policy development of both the recyclables theft law and the commercial organics law, BIC was the primary driver behind the passage of LL 145, which requires that all heavy duty trade waste vehicles operating in the City meet 2007 federal emissions standards by 2020. These trucks routinely expose residents to particulate matter and nitrogen oxide emissions at street-level, two pollutants that are known drivers of respiratory and cardiovascular harm and contributants to smog. The law accelerates the turnover of trucks, and will reduce PM and NOx by 35 – 40% by 2030. The PM reduction is the equivalent of taking 27,000 delivery trucks or 1,300 intercity coach buses off the road every year. With the active engagement of groups like the Environmental Defense Fund, the passage of LL 145 represents a significant and innovative air quality and public health win that impacts the whole city, with particular impact on areas with commercial corridors, construction activity and transfer stations. It also aligns the

commercial fleet with similar standards imposed on the City-owned fleet, and will be strongly enforced by BIC in coordination with DEP. This past February, BIC co-sponsored a very well-attended technical workshop on compliance and resources around LL 145 and will continue to provide these types of resources with our city and state partners. BIC also completed an analysis of the rate cap and revised the current maximum rates for putrescible and recyclable service to reflect industry costs and inflation while also ensuring the important customer protection measure is administered in a clearer, more transparent and routinized fashion going forward. The adjustment and administrative changes were supported by the industry and generator community.

In the Fall of 2013, BIC started participating in a working group that included representatives from Hunts Point Adjacent Area businesses and Congressman Serrano's office to review the Class B Photo ID application issued to market employees. In response to a request from working group members, BIC significantly streamlined the Photo ID application requirements and implemented a program to provide applicants with notary services for free. The changes and collaborative approach were welcomed by the businesses and the Congressman's office and we continue to value that open line of communication.

Finally, in October 2013, BIC launched NIMBUS, becoming the first city agency to fully transition its IT systems to a cloud-based platform. NIMBUS represents a \$2 million capital project that transforms the way the agency stores, manages, and utilizes data in operations. NIMBUS provides an integrated case management system that allows the staff to use heavy amounts of industry information in real-time and across units. It also provides mobile capacity for enhanced enforcement operations.

FY15 Preliminary Budget and FY14 PMMR

With that, I would now like to address BIC's preliminary Fiscal Year 2015 budget and FY14 PMMR. When I speak of Fiscal Year 2014 figures I will be using figures from the 2014 Adopted Budget and BIC's performance position as of March 1, 2014.

BIC's preliminary expense budget for Fiscal Year 2015 is \$7.19 million, an overall expense increase of \$47,000 from Fiscal Year 2014. Of the \$7.19 million, \$5.07 million is dedicated to Personal Services ("PS") and \$2.12 million is for Other Than Personnel Services ("OTPS"). The \$125,000 decrease in BIC's PS budget from 2014 is due to the conclusion of funding for the Chief Program Officer ("CPO") position. The CPO was brought on to oversee the build and development of the NIMBUS system. BIC has an authorized headcount of 82 in 2014 and 80 in 2015. The \$172,000 increase in BIC's OTPS Budget from 2014 is attributable to the conclusion of an expense PEG tied to lease savings BIC accrued in FY13 when the agency renegotiated its lease.

On the revenue side, BIC's preliminary projection for Fiscal Year 2015 is \$5.99 million, a decrease of \$367,550 from the Fiscal Year 2014 Budget.

BIC expects to collect \$3.89 million in trade waste license and registration fees for Fiscal Year 2014. Through the end of February 2014, BIC has collected \$3.1 million, or approximately 80% of target. Licensing and registration fees account for 61% of the agency's revenue, which is consistent with previous years. License and registration fees are different dependent on the type of company, but application fees range from \$1,000 to \$5,000 and are granted on a 2 year renewal basis. In FY15, BIC is projected to collect \$4.12 million in these fees.

Through February 2014, BIC has issued 544 trade waste violations and collected \$1.08 million in administrative fines and forfeitures. Expected revenue from administrative fines (which include violations for infractions like unlicensed and unregistered activity, failure to meet reporting requirements and illegal dumping) is \$1.88 million in Fiscal Year 2014 and accounts for 28% of the agency's revenue. BIC issued 947 trade waste violations and collected \$1.39 million in administrative fines and penalties during the same period in FY13. In FY15, BIC is expected to collect \$1.5 million in fines and forfeitures.

The remaining portion of the revenue budget relates to charges for services and fees, which includes market business application fees, investigative fees, and other market fees, and accounts for approximately 9% of BIC's revenue. Market applications fees range from \$3,750 to \$7,500 and are issued

on 2 or 3 year renewal cycle. The 2014 expected revenue for these fees is \$577,250 and as of March 1, BIC has collected \$340,940. In FY15, BIC is expected to collect \$360,500 in charges for services and fees.

BIC participates in the federal El Dorado Taskforce along with many other local law enforcement entities. As part of our involvement, the agency receives shares of settlements achieved by the Taskforce that reflect our participation. BIC has received \$362,748 in federal forfeiture funds as of March 1, 2014, which has been used to pay for various law enforcement expenses like trainings and equipment. We are currently funding one replacement staffer with federal funds. The agency also received a \$64,924 NYS SARA grant to complete a record digitization and storage project.

With respect to the trade waste industry, as of the end of February 2014, there are 271 active licensees, which are granted to traditional putrescible waste haulers, 65 active class 2 trade waste brokers, 1,063 Class-2 exempt construction and demolition companies, and 697 class 1 registrants typically known as "self-haulers." BIC has approved 500 license and registration applications through March 1. The total of 2,096 active companies in the trade waste industry represents a 3.4% increase from last year. License and registration applications were processed 5% - 30% faster when compared to the same period in the previous year and below the target for FY14 by over 30%.

With regards to the public wholesale markets, there are 38 active businesses in the New Fulton Fish Market, 68 in the Hunts Point Produce Market, 40 in the Hunts Point Meat Market, 43 in the Hunts Point Adjacent Area, 9 in the Gansevoort Meat Market and 25 in the Brooklyn Wholesale Meat Market. There are a total of 223 wholesalers, unloaders, trade associations and other market businesses operating in the regulated areas. This represents an 11% decrease in the number of active firms from last year, with the Fulton Fish Market seeing the greatest reduction in active operators. Market applications were processed 20% faster than the same period in the previous year and below the target for FY14 by 37%. BIC has approved 28% more market companies over this period in FY14 than the same period last year.

In Fiscal Year 2014 to date, 40 ECB violations have been issued in the various market areas. Of these, 73% have been for engine idling infractions, with the remaining issued to entities operating without a registration in a regulated area. BIC enforcement has issued 174 parking violations in the various market areas in the fiscal year to date. Of that, 54% of these violations were issued for failure to comply with street cleaning rules. The remaining violations were issued for infractions like parking on the sidewalk, failure to display inspection stickers and for commercial parking in restricted areas. BIC does not receive revenue from ECB or parking violations that are issued by agency staff. BIC issued 149 ECB and 261 parking violations in the market areas in Fiscal Year 2013.

Denials remain one of BIC's strongest enforcement tools and are a full reflection of the agency's legal and investigative expertise. To date, BIC denied 15 companies this past fiscal year, and is currently engaged in court proceedings regarding the revocation of a license of another company. BIC denies approximately 4% of companies for failing to meet the standards of good character, honesty and integrity.

This past year has proven to be an extremely fruitful year for BIC. We capably continued strong oversight of the trade waste and market industries through strategic and comprehensive enforcement and actively engaging our partner agencies in investigations across regional jurisdictions. We also worked actively and successfully on regulatory and policy measures to reduce the environmental and public health impact of the trade waste industry and continued important customer protection measures. Finally, we launched a transformative IT project that will greatly improve agency operations and place BIC as a leader in exploring new IT solutions for city agencies.

This concludes my testimony. I would be happy to answer any questions you may have.



www.TheBlackInstitute.org

Testimony of Bertha Lewis
President
Pledge 2 Protect
before

The Council of the City of New York
Committee on Sanitation and Solid Waste Management
Preliminary Budget Hearing

March 19, 2014

Good afternoon. Chairman Reynoso and members of the Committee on Sanitation and Solid Waste Management.

My name is Bertha Lewis. I am the President of The Black Institute.

The mission of The Black Institute is to shape intellectual discourse and dialogue to impact public policy uniquely from a Black perspective (a perspective which includes all people of color in the United States and throughout the Diaspora). The Black Institute (TBI) is an "Action Tank" – A think tank that takes action. By imploring a three-part strategy: Knowledge (research, data gathering, polling and academic partnerships); Leadership (civic education, training and development); and Community (ground organizing and issue based campaigns), TBI changes the direction of public debate, trains and educates new leadership and develops initiatives to build wealth, build power and deliver justice to Black people and people of color. Our four areas of focus are Economic Fairness, Education, *Environmental Justice*, and Immigration.

Thank you for the opportunity to testify on the Department of Sanitation's (DSNY) FY '15 Preliminary Budget.

I am here to specifically discuss one cost driver of the DSNY'S budget: the implementation of 2006 Solid Waste Management Plan, which was devised by the Bloomberg Administration.

If fully implemented, the 2006 Solid Waste Management Plan will cost New Yorkers billions of dollars in taxpayer money. Based on our study, *Talking Trash: A Modern Approach That Protects Communities, Increases Recycling And Reduces Costs,* one element of the plan, the costs for building and operating the East 91st Street Marine Transfer Station (MTS) have ballooned to over \$1 billion dollars since 2006, more than \$600 million more than the status quo to export waste from just four of twelve Manhattan Community Districts. The East 91st Street MTS alone will cost taxpayers \$26 million during its first year of operation and \$106 million over the next four years. The overall MTS portion of the 2006 SWMP has nearly tripled (265%) to \$708 million since 2006 and will raise the cost for transporting trash from \$90/ton to almost \$240/ton costing taxpayers almost 3-times the amount to process trash as it does today. Additionally, Sandy-like Superstorms will only further increase overall costs.

These figures are astonishing, however they exclusively speak to the East 91st Street MTS. As you know, the 2006 SWMP additionally included the building or rehabilitation of 8 MTS sites, which was subsequently reduced to 4, nonetheless cost have skyrocketed. Although the IBO has not studied cost escalations at locations other than the East 91st Street MTS, we believe that the other MTS projects face similar cost escalations, since they are based on similar designs. In particular, the de Blasio administration and/or the IBO should review the current cost impacts of the Southwest Brooklyn MTS project before proceeding further. Unfortunately, an official cost analysis of building and operating the Southwest Brooklyn MTS has not been conducted by IBO or the de Blasio administration nor is one scheduled to be conducted.

While the 2006 Solid Waste Management Program (SWMP) was an admirable plan with well-intentioned goals, it falls significantly short and at astronomical costs that will burden New York City for decade. Building the 2006 SWMP is a significant financial investment – one that requires an adequate financial analysis and equally as important - sufficiently reduces the impact on communities in-need, reduces tonnage produced, and provides sustainable long-term environmental solutions.

There are waste management approaches that will actually reduce costs:

- Reducing tonnage will reduce the need for transfer stations. New York City lags behind other major United State cities in recycling rates. In the 2006 SWMP, the City committed "to achieving a 25% diversion of recyclables through its curbside program by 2007."6 Since then, a Local Law was adopted that increased the long-term recycling goal for residential waste to 33%. In 2012, PlaNYC set an interim goal to double the DSNY-managed waste diversion rate from 15% to 30% by 2017, further enhancing the prior year's local laws. Nevertheless, NYC's recycling rate for residential and municipal solid waste is still just 15%.
- Recycling also is smart job policy. According to the EPA, every 10,000 tons of solid waste sent to a landfill creates one job. However, that same waste diverted from landfills can create 10 recycling jobs or 75 materials reuse jobs.
- Composting is another way that the City can reduce its waste stream, save money,
 and contribute to a more sustainable, more progressive future. While PlaNYC
 committed the City to delivering 50% of its food waste from landfills, that

commitment remains unfulfilled.46 Portland, San Francisco, Seattle and Boulder all have impressive curbside compost pickup programs that should be considered for adaptation to NYC. During his campaign, Mayor de Blasio called for the creation of similarly successful programs in the City within five years.

• "Waste-to-energy" is the term used for energy recovery processes that convert trash into consumable energy via combustion, digestion, fermentation or hydrolysis. The output of the conversion process is the dramatic reduction in the amount of waste destined for landfill. It also generates electricity, steam, or biogas that can be used to further reduce the overall energy profile of the original waste stream.

Given all the factors that have changed since the 2006 SWMP's approval and that have compromised the plans ability to achieve its objectives, it seems only necessary and crucial to stop and re-evaluate the 2006 SWMP in order to ensure New York City is in fact implementing a progressive solution that is environmentally sound, cost effective and sustainable for future generations.

Mr. Chairman and members of the Committee I urge you to pause the 2006 SWMP, evaluate the costs and impacts of moving forward with the current plan, so that we can chart a progressive waste management plan for the future. Thank you again for this opportunity to present this testimony.



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Testimony of GAVIN KEARNEY NEW YORK LAWYERS FOR THE PUBLIC INTEREST

at

Preliminary Budget Hearing for Sanitation and Solid Waste Management March 19, 2014

Good afternoon Chairperson Reynoso and Members of the Council, thank you for the opportunity to provide testimony today. My name is Gavin Kearney, and I direct the Environmental Justice Program at New York Lawyers for the Public Interest (NYLPI). NYLPI has been working for over a decade with the Organization of Waterfront Neighborhoods coalition, the New York City Environmental Justice Alliance, and other stakeholders to advance responsible and equitable solid waste management practices for New York City. We are also a member of Transform Don't Trash NYC, which advocates for much-needed reform of our commercial waste management system.

I would like to commend the Council and the Mayor for their continued support for the full and expedient implementation of the City's Solid Waste Management Plan (SWMP). As the Council is well aware, for far too long, a small number of low-income communities and communities of color have been burdened with handling the great majority of waste generated by all New Yorkers. Three-fourths of all waste handled in New York City is trucked to and from waste transfer stations in just three communities – North Brooklyn, the South Bronx, and Southeast Queens. These communities are plagued with asthma, cardiovascular disease and other ailments tied to air pollution and they also bear the brunt of the City's other infrastructure needs – power plants, wastewater treatment plants, heavy industry and so on.

Moreover, the system harms all New Yorkers and those communities on the receiving end of our waste. It relies on trucks driving unnecessarily long and overlapping routes to collect waste and transport it to and from these clusters of transfer stations. And far too much of our waste is buried in landfills and burned in incinerators when it could be put to more environmentally and economically beneficial use.

The Solid Waste Manage Plan passed in 2006 was the product of years of work and collaboration by environmental justice organizations, environmental organizations, public health organizations, the City Council and the Mayor. While sometimes referred to as "Bloomberg's Plan," its development, passage and continued implementation result from the efforts and support of a much broader set of stakeholders. The unassailable goals of the SWMP include dramatically reducing the traffic, air, and noise pollution caused by our over-reliance on trucks and fairly allocating throughout the five boroughs responsibility for managing the waste that we all generate. When fully implemented, the SWMP will eliminate millions of truck miles travelled in New York City each year and provide significant relief to communities where impacts are most acute.

Significant progress has been made toward the implementation of the Plan - most pieces will be in place in the foreseeable future. We urge the Council to take an active role in ensuring that this progress continues – to ensure that all marine transfer stations are completed as quickly as possible.

I would also like to highlight one critical piece of infrastructure for which progress appears to be stalled – the Gansevoort recycling facility in Manhattan. The Gansevoort facility will be part of a City-wide network of facilities for receiving metal, glass, plastic and paper collected by the City and moving it to the Sims facility in Sunset Park, Brooklyn by barge. Currently, Manhattan's metal, glass, and plastic are trucked to facilities in Hunts Point in the Bronx and Jersey City. In the South Bronx alone, this generates thousands of unnecessary truck trips each year. Siting Gansevoort will resolve this problem. It will also free up the West 59th Street MTS, which currently receives Manhattan's paper, to handle commercial waste, much of which is otherwise trucked to outer-borough transfer stations. For these reasons, the Gansevoort MTS is vital to achieving the goals of the SWMP and will result in significant, tangible benefits.

Because it requires a different footprint then the MTS currently on-site, the Gansevoort Recyclable MTS required an amendment to the state Hudson River Park Act. The amendment was passed in 2008 with the condition that construction not proceed until the City and State commit an unspecified amount of funding to the development of the Hudson River Park via a Memorandum of Understanding (MOU). While a draft MOU was developed several years ago, the State has yet to commit to signing it. We urge the Council and the Mayor to make completion of the MOU a priority issue, and to work with the many SWMP supporters representing New York City in Albany to get it done.

We also recently learned that a proposed contract for the design of the Gansevoort MTS may have been put on hold. If true, this raises concern. The facility has been delayed for too long already and the City should do what it can to ensure that once an MOU is assigned it can hit the ground running. To that end, we urge the Council to look into the circumstances around this contract and if necessary to advocate for resumption of the facility's design.

Thank you for the opportunity to testify. We look forward to working with the Council on these important issues, as well as on legislation to ensure long overdue relief for overburdened communities and reform of the City's sub-par commercial waste management system.



555 East 90th Street New York, NY 10128-7803 www.asphaltgreen.org

212 369 8890

AquaCenter Fitness Center Delacorte Olympic Pool Murphy Center Sports Field

FAX: 212 722 1701

Testimony presented by Carol Tweedy Executive Director, Asphalt Green to the

New York City Council Committee on Sanitation Budget Hearing March 19, 2014

The costs of the MTS at 91st Street have ballooned. Capital costs have increased from \$44M in 2002 to \$181M in 2012 and still climbing. In the first year, operating costs will balloon from the current cost of \$90/ton to \$238/ton.

But there are hidden costs. Asphalt Green anticipates that there will be a considerable loss of business because of the fears about safety and emissions at the site. Our business model is that our fee based programs spin off a surplus. With that money and the additional funds that we raise, we are able to provide our free programs, citywide. This year, we will serve 30,000 children. We know already that our day camp registration is significantly below where it was last year. If that continues until the summer, we will have lost 300 campers. That will translate into a loss of 12,000 free slots all over the city – in our learn-to-swim program, recess enhancement and middle school Community Sports Leagues. The free services go to those who most need it - schools with over 75% free or reduced price lunch, or communities with high obesity rates. It will impact the 26 Council districts that we now serve.

There are other costs to the construction of the MTS. We and the City have funded capital improvements. Because the City owns the land,

and it recognizes the value of its asset, the City has contributed \$20M for capital repairs over the course of Asphalt Green's life. And Asphalt Green, has raised with private dollars, even more - \$30 million. The value of the investment on the part of the City and on the part of Asphalt Green will decline.

March 19, 2014

The Honorable Antonio Reynoso, Chair New York City Council Sanitation and Solid Waste Management Committee 250 Broadway, Committee Room 14th Floor

New York, NY 10007

Eric M. Bruzaitis
O.U.T.R.A.G.E.
2 Kingsland Avenue
Brooklyn, NY 11211
347-200-7155
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Re: 2015 Preliminary Budget: Department of Sanitation

Good morning, and thank you for the opportunity to testify today.

My name is Eric Bruzaitis. I am here today representing Organizations United for Trash Reduction And Garbage Equity (OUTRAGE). OUTRAGE is a coalition of more than two dozen community and civic groups which came together in 1999 to address the growth of the waste industry in East Williamsburg and Greenpoint.

OUTRAGE is committed to the full implementation of the 2006 Solid Waste Management Plan (SWMP). The essential goal of the SWMP is to ensure that the burden of solid waste processing is fairly distributed across each of the five boroughs. Currently, the city's waste transfer stations (WTS) are still concentrated in four Community Districts: BX1 and BX2 in the Bronx, QN12 in Queens and most dramatically in BK1, which is home to 16 WTS and is responsible for handling 40% of New York City's solid waste.

As we testified at the 2013 & 2014 Preliminary Budget Hearing, OUTRAGE's 2009 follow up to its 2004 Truck Traffic Study of BK1, showed significant increases in the amount of truck traffic and elevated levels of airborne particulates from their exhaust. At one particular location, 50% of the trucks counted were waste transport vehicles. At another location, which in 2004 showed 20 trucks per hour, in 2009 saw 80 trucks per hour. Marine Transfer Stations (MTS), combined with long-term export contracts, is expected to reduce tens of thousands of truck trips per year, which would mean a drastic reduction in the almost 5000 truck trips BK1 now endures daily. OUTRAGE believes that bringing all MTS online as soon as possible will improve the health conditions of the four overburdened Community Districts.

OUTRAGE looks forward to the openning of the Hamilton Avenue and North Shore Queens MTS. However, we continue to be frustrated that East 91st Street and South West Brooklyn continue to be stalled. We expect this Mayor and class of the City Council to commit to the SWMP and that no cuts to the Department of Sanitation budget will be made where SWMP implementation is concerned.

In addition to our strong commitment to SWMP implementation, OUTRAGE is also working towards reducing processing capacity at the existing WTS. We would like to thank Chairman Reynoso for his past commitment to reducing the capacity at WTS especially in the city's over-burdened communities. We hope that he, and this committee will continue to fight for these and other waste reduction measures going forward. Along these lines, we support increased commitments to recycling and other solutions which will reduce capacity over the next few years.

Lastly, OUTRAGE's Truck Enforcement Task Force has been working with NYC Council, DOT, NYPD and state DEC to improve enforcement of private waste haul vehicles and waste transfer stations. While the 2015 Preliminary Budget does allocate funds for 40 enforcement officers within the DSNY, we feel that more resources must me made available to police commercial operators who threaten both the public health and safety by flaunting city regulations.

We look forward to continuing our work with Councilman Reynoso's office, and this committee to improve the conditions stemming from the North Brooklyn's disproportionate share of NYC's waste handling operations.

Thank you.

March 19, 2014

The Honorable Antonio Reynoso, Chair New York City Council Sanitation and Solid Waste Management Committee 250 Broadway, Committee Room 14th Floor

New York, NY 10007

Eric M. Bruzaitis O.U.T.R.A.G.E. 2 Kingsland Avenue Brooklyn, NY 11211 347-200-7155 ebruzaitis@yahoo.com

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We look forward to continuing our work with Councilman Reynoso's office, and this committee to improve the conditions stemming from the North Brooklyn's disproportionate share of NYC's waste handling operations.

Thank you.



THE CITY OF NEW YORK INDEPENDENT BUDGET OFFICE

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May 22, 2012

Council Member Jessica S. Lappin Council of the City of New York 250 Broadway Room 1762 New York, NY 10007

Dear Council Member Lappin:

At your request, the Independent Budget Office has prepared an estimate of the cost of constructing and operating the East 91st Marine Transfer Station (MTS) compared to continuation of the interim plan of exporting waste to transfer stations in New Jersey under short-term contracts. Based on IBO's analysis, the present value of the twenty-year cost of exporting under interim contracts to transfer stations in New Jersey is \$218.9 million, compared with \$554.3 million for export at the East 91st MTS. We estimate that the cost per ton in the first year the new facility could be operating is \$90 for the interim plan and \$238 for the East 91st MTS. As construction of the East 91st MTS is part of the broader state mandated-Solid Waste Management Plan which sought to balance fiscal costs, environmental impacts and concerns of communities across the city, any option that did not include construction of the plant would require modification of the SWMP by the administration and approval by the City Council and New York State.

New York City is operating under a twenty-year plan, approved by the City Council and New York State in 2006, that details how the city will handle all of its solid waste. The aptly named Solid Waste Management Plan stated that the city would construct a marine transfer station at East 91st Street to containerize and export residential waste from Community Districts 5, 6, 8, and 11 in Manhattan, while the remaining residential waste would be exported by garbage truck to a waste-to-energy facility in New Jersey. The city has applied for permits and sought construction bids for the East 91st MTS and is currently negotiating a twenty-year contract with the Port Authority of New York and New Jersey for the export of waste from the other districts in Manhattan. In the interim, while the long-term plan is being implemented, the city has secured short-term contracts with private transfer stations to export all of Manhattan's residential waste.

It is possible to break down the first year per ton cost into export fees, transportation costs, and facility costs. Both options include the cost of contracting with a private transfer station for the ultimate disposal of the waste. The per ton export cost is higher under the East 91st MTS option

primarily because our estimate is based on recent contract bids and the twenty-year contracts, like the one the city would secure for East 91st MTS, have higher costs than the interim contracts. Both options also include an estimate of the cost to transport waste to the transfer stations. Given the shorter distance to the East 91st MTS than New Jersey and a lack of tolls, transportation costs are lower under the East 91st MTS option. The largest difference between the two options is the additional cost attributable only to the East 91st MTS for building the facility and operating it with municipal employees.

First Year Projected Cost by Category				
	Interim Plan	East 91st MTS		
Export Per Ton	\$76.91	\$106.72		
Transport Per Ton	13.09	3.23		
Facility Per Ton	0.00	128.47		
Total Cost Per Ton	\$90.00	\$238.43		
SOURCE: 1BO				

A summary of the assumptions used in the analysis are shown in the table below (please see the attached memo for a detailed explanation of the methodology and assumptions). The analysis begins in 2016, when East 91st MTS would be operational, and extends over the twenty-year export contract period. Whenever possible, IBO relied on observed data for 2011. Tonnage and number of truck trips is based on 2011 data. Capital costs for the East 91st MTS (\$226.5 million) were based on the Executive 2013 Capital Commitment Plan while the Department of Sanitation (DSNY) provided updated 2012 operating costs (\$9.4 million in 2016). Costs that are expected to grow over time were assumed to rise between 2 percent a year and 4 percent a year, depending on the type of cost. IBO's estimates only reflect the direct cost of the two options. Any additional economic activity or tax revenue that would result from the construction and operation of the East 91st MTS in the city were not taken into account, and neither were environmental impacts.

	Baseline	Source	Annual Growth Assumption
Shared Assumptions			
Tonnage	577	2011 observed	Flat
Trips	16,340	2011 observed	Flat
Cost Per Mile	\$1.39	2011 estimate, grown to 2016	2% a year
Relay Shift Cost	\$403.63	2011 estimate, grown to 2016	4% a year
Dump-On-Shift Differential	\$7.63	2011 estimate, grown to 2016	4% a year
Interim Plan			
Export Fee	\$76.91	Projected, inflated to 2016, based on Interstate Waste Services	2% a year; 4% at renewal
Mileage	260,537	2011 estimate	Flat
Tolls	\$475,770	2011 estimate, grown to 2016	2% a year
Number of Relays	10,014	2011 estimate, assume 3 trips per worker	Flat
Dump-on-Shift Trips	6,326	2011 estimate, 2 payments per trip	Flat
East 91st MTS			
Export Fee	\$106.72	Projected, average of existing LT contracts, at 90 pecent to reflect city operation of MTS	2.5% a year
Mileage	54,925	2011 estimated	Flat
Number of Relays	2,778	2011 projection, assume 4 trips per worker	Flat
Dump-on-Shift Trips	13,562	2011 estimate, 2 payments per trip	Flat
Facility OM	\$9,355,091	2012 estimate, grown to 2016	3% a year
Facility Capital Cost	\$226,487,000	2013 Executive Capital Commitment Plan	Flat
Facility Debt Service	\$13,031,141	Capital Cost (30-year bond at 4%)	Flat

The most difficult component to model was the cost of the export fee. The East 91st MTS would load containerized waste on barges at a city-operated facility. The existing long-term contracts are for rail-based export and two of the three are at privately-owned transfer stations (the cost of operating the facility is built into the contract). The absence of similar contracts for barge-based export from city-operated facilities makes estimating export costs more difficult. With regards to the interim plan option, the cost per ton of export has varied widely when the interim contracts have been renewed.

Given the wide variation in export fees, IBO performed tests to gauge the sensitivity of the total cost estimates to changes in export fees under both options. For example, if the five-year export contracts in the interim option renew with an 8 percent increase, compared with the 4 percent assumed in the baseline, the total cost of the interim option (in current dollars) would increase by \$17.8 million. Similarly, if the renewal increase is 20 percent (still below the increases the city saw in the early years of the interim plan), total cost would increase by \$79.7 million. If the long-term export contract in the East 91st MTS option is 10 percent less than the baseline and increases at 2 percent a year, the total cost the East 91st MTS option would be \$34.6 million lower. However, if the contract is at \$125 per ton and grows 3 percent a year, the total cost would be \$57.1 million more. Note, however, that given the additional cost to construct and operate the East 91st MTS, total costs are higher for the East 91st MTS option under each of the scenarios.

The city is currently negotiating a long-term, 20-year contract with the Port Authority to accept the waste from the other community districts in Manhattan (about 1,680 tons per day) at the Essex County Resource Recovery Facility in Newark, New Jersey. According to DSNY, the long-term contract will preclude using the facility for waste planned to be processed at the East 91st MTS because the tonnage will fully exhaust the existing available capacity of the Essex facility (exclusive of other waste being processed at the facility from municipalities in New Jersey). Therefore, the city would need to contract with other transfer stations that primarily landfill waste, making the export fee under the interim option more uncertain.

IBO's analysis assumed that the interim option would be a series of five-year contracts as has been the case since the late 1990s. However, a 20-year contract is currently being negotiated for waste in the rest of Manhattan, and it would be possible to do so for the East 91st MTS. Twenty-year contracts may have a higher initial price than the current interim contracts but are likely to be less volatile over time and the city might benefit from securing landfill capacity, especially if constraints on the supply of landfill space drive up prices over the long-term. While IBO did not model that variation, it is possible to consider the impact. For example, if export costs were the same under the two options, then the East 91st MTS would cost \$119 more per ton than continuing the interim plan in the first year of operation, compared with a difference of \$148 dollars under our baseline assumptions.

The city considered many factors in addition to cost in preparing the comprehensive Solid Waste Management Plan for the city, such as environmental impact of waste, fairness among the boroughs, and long-term reliability and efficiency. Finally, it is important to note that continuation of the interim plan instead of construction of the East 91st MTS would be considered a modification of the Solid Waste Management Plan. The administration would need to prepare a revision of the SWMP and the revised plan would require approval by the City Council and the NYS Department of Environmental Conservation.

If you have any questions or would like more information, please feel free to contact me or Ana Champeny (anac@ibo.nyc.ny.us or 212-442-1524) who conducted the analysis.

	Sincerely,
	Ronnie Lowenstein
enclosure	

cc: John J. Doherty

NYC Independent Budget Office

DATE:

May 22, 2012

TO:

Ronnie Lowenstein

George Sweeting

FROM:

Ana Champeny

SUBJECT:

Methodology, Assumptions, and Results of the Comparison of Waste Export Costs via

the East 91st Marine Transfer Station or the Interim Plan

Background

In 2006, the city's 20-year Solid Waste Management Plan (SWMP) was approved by the City Council and the NYS Department of Environmental Conservation. The 2006 SWMP seeks to balance environmental, borough equity, infrastructure, and financial considerations.

The SWMP called for the city to enter into long-term waste export contracts for disposal of all residential waste. There were two strategies. Under the first, waste would be handled by private transfer stations that would either containerize the waste and transport it by rail or barge, or process it at a waste-to-energy plant. Under the second, the city would reconstruct five city-owned transfer stations to containerize waste for transport either by barge (four transfer stations) or rail (one transfer station) and enter into long-term contracts for transport and disposal of the waste.

Residential waste in Manhattan would be handled by a combination of the two strategies. Waste for community districts 5, 6, 8, and 11 (the East 91st waste shed), about 720 tons per day, would be containerized at the city-owned East 91st Marine Transfer Station and transported by barge to either an ocean-going barge or rail connection. Then, the containerized waste would be transported to the landfill (under a twenty-year contract). For the rest of Manhattan, about 1,680 tons per day, the city would enter into a twenty-year contract with the Port Authority of New York and New Jersey to process the waste at the Essex County Resource Recovery Facility in Newark, New Jersey with the city delivering waste to the transfer station by garbage truck.

Currently, the city is negotiating the long-term contract with the Port Authority, applying for the necessary permits for East 91st MTS, and seeking bids from contractors for the construction of the East 91st MTS. In the meantime, the city has been entering into a series of interim 3-year contracts (with an option for two one-year extensions, at the city's discretion) with local transfer stations to handle all Manhattan waste. In 2011, an average of 1,164 tons per day were driven from Manhattan to the Essex County Resource Recovery Facility, another 774 tons per day were driven to a transfer station operated by Interstate Waste Services, and the remaining 26 tons per day were driven to other transfer stations, including a Waste Management Transfer Station in Elizabeth NJ and a transfer station in Newark NJ.

(These tonnages are lower than those presented in the SWMP because they reflect actual tonnage collected by DSNY and there has been a citywide decline in refuse tonnage in recent years).

Methodology and Limitations

IBO was asked to conduct a fiscal estimate comparing construction and operation of the East 91^{st} MTS with continuation of the interim plan.

In order to determine the annual cost, we estimated the cost for the export fee, transportation to the transfer station, and facility operations under each option, while collection costs within the district were assumed to be the same under each option. Each cost component is adjusted annually at the rate specified in the assumptions table; tonnage and truck runs are kept constant. Since construction at East 91st MTS has not begun, we assumed that the facility would be operational in 2016 and focused our analysis on the twenty-year period that would be covered by the export contract at the East 91st MTS. Finally, to compare the two estimates in 2016 dollars, we calculate the present value of the total costs over the twenty-year period, using a 6 percent discount rate.

According to the Department of Sanitation, the twenty-year contract currently under negotiation with the Port Authority to take all the non-East 91st Manhattan waste to the Essex County Resource Recovery Facility, would preclude that facility from accepting any waste from the East 91st waste shed because of insufficient capacity. While the facility is permitted for 2,800 tons per day, it also accepts waste from 22 municipalities in the surrounding area, including New York City, that take up the remaining capacity. The average daily tonnage from the non-East 91st waste shed, expected to be 1,680 tons per day in the SWMP (actual tonnage in 2011 was 1,393 tons per day and 1,457 tons per day over the past six years), already exceeds the average tons per day that the city has delivered to the Essex County Resource Recovery Facility under the interim contracts in any year since 2003. Additionally, since 1999 when the city began using private transfer stations to handle Manhattan waste, there have been between three and six different transfer stations under contract at any given time. Therefore, if the city continued interim export contracts for the East 91st waste shed, the city would need to contract with transfer stations other than the Essex County Resource Recovery Facility. Since the other transfer stations landfill rather than incinerate waste, the export cost may be more volatile because it is affected by supply and demand for landfill space.

The city considered many factors in addition to cost in preparing the comprehensive Solid Waste Management Plan for the city, such as environmental impact of waste, fairness among the boroughs, and long-term reliability and efficiency. It is also important to note that not constructing the East 91st MTS would be a modification to the SWMP, affecting more than 5 percent of the city's residential waste. As such, it would require the administration to prepare a modification of the SWMP that would need to be approved by the City Council and the New York State Department of Environmental Conservation.

Our analysis is limited to the city cost associated with exporting the waste in the East 91st waste shed. We do not consider the economic or fiscal impact of either undertaking a large construction project in Manhattan or keeping the waste processing in the city. For example, construction activity would

generate jobs, tax revenue, and economic activity in the area. We also did not consider the environmental impact of the two options.

Data Sources and Assumptions

Data Sources. IBO used DSNY data on each individual sanitation truck run to estimate tonnage, number of truck runs, and number of relay runs (where a truck is driven to offload on a later shift by a different sanitation worker). Data on annual contract costs was compiled from information provided by DSNY. DSNY also provided information on miles per gallon for garbage trucks and per gallon cost of fuel. The capital cost of the facility was based on the planned cost in the 2013 Executive Capital Commitment Plan. DSNY provided IBO with an updated cost for operating the East 91st MTS based on recently negotiated staffing patterns. The NYC Office of Management and Budget provided information on current interest rates for 30-year tax exempt bonds.

Assumptions. The following table provides a summary of the assumptions that IBO made in order to estimate the cost of the East 91st MTS option and the Interim Plan option.

	Baseline	Source	Annual Growth Assumption
Shared Assumptions			
Tonnage	577	2011 observed	Flat
Trips	16,340	2011 observed	Flat
Cost Per Mile	\$1.39	2011 estimate, grown to 2016	2% a year
Relay Shift Cost	\$403.63	2011 estimate, grown to 2016	4% a year
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Interim Plan			
Export Fee	\$76.91	Projected, inflated to 2016, based on	2% a year; 4% at renewal
		Interstate Waste Services	
Mileage	260,537	2011 estimate	Flat
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Assumptions Shared across the Options. IBO assumed that the tons per day (577) and number of truck trips per year (16,340) would remain constant at the level observed in 2011 under both scenarios. The 2011 cost per mile was the cost of the gas (\$1.15 per mile) plus an allotment for wear and tear (\$0.10 per mile), assumed to grow 2 percent a year.

When sanitation workers drive the truck to the transfer station during their regular shift, they receive a dump-on-shift payment. DSNY also relays collection trucks, which means that a different sanitation worker (just one, rather than the two-person collection crew), drives the truck to offload on a separate shift, usually at night when there is less traffic and tolls are less expensive. Generally, one worker will relay between three and four trucks per shift. The cost of a relay shift and the dump-on shift payment for 2011 were assumed to grow 4 percent a year, reflecting recent annual growth in personnel costs.

Interim Export Option Assumptions. For the interim plan option, the export fee was based on the current fee for the Interstate Waste Services contract for Manhattan waste. Interim plan contracts have a standard increase of 2 percent a year during the term of the contract. Based on a review of the percentage change in contract cost at renewal, IBO assumed that the interim plan contract increased 4 percent at each renewal. The contracts have a three-year term, with the city having the option to extend for two additional years, so IBO assumed renewal every five years. Based on the time when each load was offloaded, IBO was able to estimate the cost of tolls (using the cost for a three-axle truck at either the peak, off-peak or overnight rate). Toll costs were assumed to grow 2 percent a year.

IBO assumed that the number of truck runs that were relayed and the number that were offloaded by the collection crew would stay the same as observed in 2011, with 61 percent of truck runs needing relay. Given the further distance to the transfer stations, IBO assumed that a worker would relay three trucks on one shift. IBO estimated the mileage associated with driving the trucks to the transfer station. For trucks that are relayed, IBO estimated the distance from the center of the district to the district garage and then from the garage to the transfer station. For trucks that were not relayed, IBO estimated the distance from the center of the district to the transfer station. In both instances, the route with the shortest mileage on Google maps was used.

East 91st MTS Option Assumptions. The export contract for the East 91st MTS would be a twenty-year contract, in accordance with the Solid Waste Management Plan. To date, the city has awarded three long-term contracts, all for rail-based export, with two at privately-operated transfer stations. Conversely, waste at the East 91st MTS, a city-operated transfer station, would be transported by barge to either ocean-going barge or rail. The three long-term contracts currently in effect have a service fee that is set monthly by summing a series of cost components, such as fees for transporting the waste to the landfill, the tipping fee at the landfill, cost of operating the transfer facility, a fuel surcharge, and the cost of the containers and railcars. The contracts also specify how each component is adjusted during the contract period. IBO assumed the East 91st MTS contract would start at 90 percent of the average per ton cost of the three current contracts; we assume costs would be lower because East 91st would be operated by city personnel, unlike Waste Management's contracts at Harlem River Yards and Varick Street. Based on the last three years, the long-term contract fee has grown about 2.5 percent a year, which is the annual increase in our estimate.

With the East 91st waste shed community districts closer to the East 91st MTS than to the New Jersey transfer stations, IBO assumed that fewer trucks would need to be relayed. DSNY confirmed that they expect over 80 percent of the truck trips in the four community districts to be offloaded by the collection crew. IBO also looked at the share of trucks being relayed in 2010 and 2011 in certain

community districts that have nearby transfer stations (the Bronx, Northern Brooklyn, and Staten Island) and found that 83 percent of trucks were offloaded by the collection crew. In the analysis, we assume that 17 percent of the truck trips to East 91st will be relayed and 83 percent will be dumped on shift. Since the transfer station is closer, we assume that each worker would relay four trucks per shift. There are no tolls associated with the East 91st MTS option. The same methodology is used to determine truck mileage as with the interim option.

The East 91st MTS option includes costs for constructing and operating the transfer station. The capital cost of the MTS was based on the 2013 Executive Capital Commitment Plan. The annual debt service cost was based on 30-year bonds offered at 4 percent interest, just 30 basis points above the rate the city would currently expect for that bond term. Debt service costs are flat; no refunding or change in terms is assumed. DSNY provided operating costs for the MTS based on staffing negotiated with the union. In addition to salaries and differentials, the operating cost includes fringe costs and other than personal service costs of the facility. Given that the transfer station has both personnel costs and other costs, IBO assumes the operating costs will grow at 3 percent a year (midway between the 4 percent we use for relay shifts and 2 percent for gas and tolls).

Results

IBO found that over twenty years, the cost in present value terms of continuing the interim plan would total \$218.9 million, compared with \$554.3 million for the East 91st MTS. The first year cost is \$15.7 million or \$90 per ton for the interim plan, compared with \$41.5 million or \$238 per ton for the East 91st MTS. The Interim Plan option cost grows at 2.5 percent a year on average, while the East 91st MTS option grows an average of 2 percent a year.

Preliminary Results, Interim versus East 91st MTS				
	Interim Plan		East 91st MTS	
		Cost Per		Cost Per
	Total Cost	Ton	Total Cost	Ton
2016	\$15,683,658	\$90.00	\$41,546,606	\$238.43
2017	\$16,027,095	\$91.98	\$42,313,317	\$242.83
2018	\$16,378,261	\$93.99	\$43,100,849	\$247.34
2019	\$16,737,251	\$96.05	\$43,909,778	\$251.99
2020	\$17,294,101	\$99.25	\$44,740,693	\$256.76
2021	\$17,770,111	\$101.98	\$45,594,203	\$261.65
2022	\$18,160,160	\$104.22	\$46,470,931	\$266.69
2023	\$18,560,199	\$106.51	\$47,371,518	\$271.85
2024	\$18,968,604	\$108.86	\$48,296,624	\$277.16
2025	\$19,599,827	\$112.48	\$49,246,927	\$282.62
2026	\$20,140,338	\$115.58	\$50,223,124	\$288.22
2027	\$20,585,040	\$118.13	\$51,225,932	\$293.97
2028	\$21,040,363	\$120.75	\$52,256,088	\$299.88
2029	\$21,507,313	\$123.43	\$53,314,898	\$305.96
2030	\$22,227,385	\$127.56	\$54,402,592	\$312.20
2031	\$22,845,256	\$131.10	\$55,519,972	\$318.62
2032	\$23,355,855	\$134.03	\$56,667,859	\$325.20
2033	\$23,876,099	\$137.02	\$57,847,102	\$331.97
2034	\$24,409,644	\$140.08	\$59,058,570	\$338.92
2035	\$25,228,504	\$144.78	\$60,303,159	\$346.06
Present Value	\$218,870,863		\$554,295,0	35
SOURCE: IBO				
NOTE: Present Value uses 6 percent discount rate.				

IBO also looked separately at the cost for export, transportation, and facility operations (all on a per ton basis). The export cost is about 39 percent higher under the East 91st MTS option. This results stems from the fact that the projected export cost is based on existing long-term and interim contracts, and long-term contracts are currently more costly. The export costs are the most difficult to measure accurately and forecast over the twenty-year horizon, because of volatility and uncertainty, and we conduct a sensitivity analysis to see how changing our assumptions about contract costs affects the results.

Preliminary Results, Interim versus East 91st MTS							
	Interim Plan			Е	East 91st MTS		
	Export	Transport	Facility	Export	Transport	Facility	
	Per Ton	Per Ton	Per Ton	Per Ton	Per Ton	Per Ton	
2016	\$76.91	\$13.09	\$0.00	\$106.72	\$3.23	\$128.47	
2017	\$78.45	\$13.53	\$0.00	\$109.39	\$3.36	\$130.08	
2018	\$80.02	\$13.97	\$0.00	\$112.13	\$3.48	\$131.74	
2019	\$81.62	\$14.43	\$0.00	\$114.93	\$3.61	\$133.45	
2020	\$84.34	\$14.91	\$0.00	\$117.80	\$3.75	\$135.21	
2021	\$86.58	\$15.40	\$0.00	\$120.75	\$3.89	\$137.02	
2022	\$88.31	\$15.91	\$0.00	\$123.77	\$4.03	\$138.89	
2023	\$90.08	\$16.43	\$0.00	\$126.86	\$4.18	\$140.81	
2024	\$91.88	\$16.98	\$0.00	\$130.03	\$4.34	\$142.79	
2025	\$94.94	\$17.54	\$0.00	\$133.28	\$4.50	\$144.83	
2026	\$97.46	\$18.12	\$0.00	\$136.61	\$4.67	\$146.93	
2027	\$99.41	\$18.72	\$0.00	\$140.03	\$4.85	\$149.10	
2028	\$101.40	\$19.35	\$0.00	\$143.53	\$5.03	\$151.33	
2029	\$103.42	\$20.01	\$0.00	\$147.12	\$5.22	\$153.62	
2030	\$106.87	\$20.69	\$0.00	\$150.80	\$5.42	\$155.99	
2031	\$109.71	\$21.3 9	\$0.00	\$154.57	\$5.63	\$158.42	
2032	\$111.91	\$22.12	\$0.00	\$158.43	\$5.84	\$160.93	
2033	\$114.14	\$22.88	\$0.00	\$162.39	\$6.06	\$163.52	
2034	\$116.42	\$23.66	\$0.00	\$166.45	\$6.29	\$166.18	
2035	\$120.31	\$24.47	\$0.00	\$170.61	\$6.53	\$168.92	
SOURCE: IB	0						

The export cost per ton is the majority of the cost of the interim plan, with only about 15 percent of the first year cost attributable to the cost of transporting the waste from the community districts to transfer stations in New Jersey. The transport cost under the East 91st MTS option is about 75 percent lower than the interim plan because the transfer station is located closer to the community districts (about one-fifth of the mileage estimated under the interim option), there are no tolls, and there is less relaying of trucks.

The East 91st MTS option includes an additional cost not present in the interim plan option, the cost of constructing and operating the facility, which IBO estimates to be about \$128 per ton in the first year. The facility costs are largely fixed and a slight increase or decrease in tonnage would not change the total cost for the facility, but it would go up or down on a per ton basis. The estimates for export fee and transportation are more stable on a per ton basis, so that more tonnage would increase the total cost but not the per ton cost.

Sensitivity to Changes in Assumptions. As noted, the most difficult component to estimate was the export fee with either the interim five-year contracts or the twenty-year contract for export at the East

91st MTS. IBO considered the sensitivity of the estimate to these assumptions by running the analysis with different assumptions for contract costs.

The price per ton at renewal for the interim contracts is especially volatile and we estimate the total cost for the interim plan if the renewal saw increases of 8, 14, or 20 percent, rather than the 4 percent in the baseline assumption. Conversely, the city has not yet entered into a long-term contract for containerization at a city-owned marine transfer station. So, we modeled the cost if the long-term export cost was initially lower or higher, or grew either more quickly or more slowly than our baseline.

The results of our sensitivity analysis show that the cost can vary greatly based on the assumptions. For example, if the five-year contracts renewed with an 8 percent increase, compared to the 4 percent in the baseline, the total cost in current dollars would increase by \$17.8 million. However, if the renewal increase were 20 percent (still less than what the city saw in the early years of the interim plan), the cost would increase by \$79.7 million. If the East 91st MTS long-term export contract were 10 percent less than the baseline and increased at 2 percent a year, the total cost would be \$34.6 million lower. However, if the contract were at \$125 per ton and 3 percent a year growth, the total cost would be \$57.1 million more.

•	\$218.9 \$236.7 \$266.0 \$298.6	\$17.8 \$47.3 \$79.7
Interim Plan Option, Renewal Increase Adjustment Baseline Model, renewal at 4 percent Renewal at 8 percent Renewal at 14 percent Renewal at 20 percent	\$218.9 \$236.7 \$266.0	\$17.8 \$47.2
Baseline Model, renewal at 4 percent Renewal at 8 percent Renewal at 14 percent Renewal at 20 percent	\$236.7 \$266.0	\$47.2
Renewal at 8 percent Renewal at 14 percent Renewal at 20 percent	\$236.7 \$266.0	\$47.2
Renewal at 14 percent Renewal at 20 percent	\$266.0	\$47.2
Renewal at 20 percent		·
·	\$298.6	\$79.7
East 91st MTS Option, Baseline and Annnual Increase		
Adjustments		
Baseline Model, \$107 per ton/2.5 percent a year	\$554.3	
\$96 per ton/2 percent a year	\$519.7	(\$34.6
\$125 per ton/2 percent a year	\$586.7	\$32.4
\$125 per ton/3 percent a year	\$611.4	\$57.1

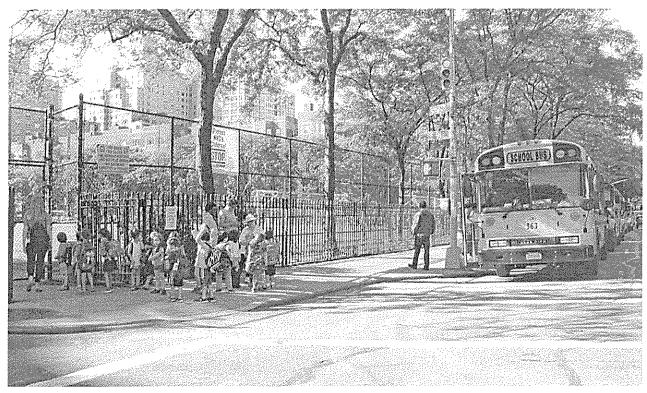




A Modern Approach That Protects Communities, Increases Recycling And Reduces Costs







34,000 children come to Asphalt Green every year; 52% receive programs for free.

ledge 2 Protect is a growing coalition of diverse citizens of New York City who are working together to protect the health and safety of New Yorkers by raising awareness of the fiscal, environmental and community impacts of the City's current solid waste management system and plan. Although Pledge 2 Protect was initially founded to alert the City's elected officials about the risks of building the East 91st Street Marine Transfer Station, our purpose and mission have expanded. We have always said that transfer stations do not belong in residential neighborhoods—anywhere. Many communities have borne disproportionate loads in handling New York City's waste, and the goal should be to reduce those impacts across the board, not shift them. New Yorkers deserve a plan driven by modern solid waste solutions that are more sustainable and cost-effective for the long run.

GOALS:

■ Protect all New Yorkers from the harmful health and safety impacts of waste stations, especially children and seniors, who are the most vulnerable populations to the air pollution created by diesel trucks and tugs, and the low-income communities and communities of color that have traditionally borne a significant load of the City's solid waste management.

- Protect the City's financial and natural resources by educating New Yorkers about the need to reduce garbage at its source, to reuse, to recycle and to take advantage of safe and sustainable energy-recovery technologies.
- **Protect** the fiscal health of the City by removing unnecessary and avoidable waste management costs.
- Protect the rights of all to clean air and water by supporting appropriate measures and guidelines that control toxic emissions, unsafe noise levels and pesticide use.
- Protect the waterways, residents and businesses located in low-lying areas susceptible to flooding and the other potential environmental impacts of major storms that are more and more likely to hit the City in the future.

Our first initiative has been to educate New Yorkers about the mushrooming costs and significant environmental and community impacts of the proposed East 91st Street MTS. With the knowledge we have acquired through this process, we have expanded our efforts to also raise awareness and propose solutions to the broader shortcomings of the 2006 Solid Waste Management Plan.

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Executive Summary

ver the past decade, cities around the world have competed over the latest ideas in business, innovation and sustainability. New York City has frequently set the global standard in these endeavors—but has fallen behind in its handling of solid waste.

Managing garbage in New York City (NYC) is the huge, complex task. Every single minute, residents, tourists, commuters and businesses produce more than 25 tons of waste. This adds up to 14 million tons of trash each year. As the City expands and develops further, the amount of waste generated in the City will only increase.

In 2006, the City finalized a Solid Waste Management Plan (SWMP). The SWMP's main objective was to establish a "cost-effective, reliable, and environmentally sound system for managing the City's waste over the next 20 years."2 The SWMP had a number of laudable principles, including recognizing the environmental issues surrounding waste and treating each borough fairly, thereby reducing the harm to those communities who have borne the significant load of handling waste. Unfortunately however, the SWMP fundamentally did not place sufficient emphasis on reducing the amount of waste packaging being processed by the system (via reduction in packaging, increased recycling, and other waste reduction strategies) and placed most emphasis on the export of waste by building costly infrastructure in the form of transfer stations to transport waste out of the City. All communities would benefit from an aggressive recycling program and efforts to reduce the City's volume of garbage at the source. In addition, the implementation of the SWMP and other changed conditions since 2006 have resulted in many of the original goals not being achieved. This failure has occurred despite enormous increased cost to the City both in capital dollars and operating expenses.

Sadly, several studies discussed in this report show that the implementation of the SWMP fails to effectively reduce the harm to overburdened communities, imposes unnecessary new burdens on other communities, exceeds all initial budgets both in capital and operating costs and fails to reduce the amount of waste NYC generates through source reduction, reuse and recycling efforts. Specifically:

The SWMP does not help the Brooklyn, Queens and Bronx communities that currently bear a significant portion of today's waste disposal. Manhattan's residential waste does not get tipped in any New York City borough. It goes to disposal sites in New Jersey or Yonkers. As for commercial waste, Manhattan's commercial waste is transported to New Jersey (roughly 50%), the Bronx (25%), and Brooklyn and

Queens (25% combined). A key feature of the SWMP was to divert a portion of that commercial waste to the proposed East 91st Street MTS. However, at its maximum permitted capacity, only 1.6% of the City's commercial garbage-and only 1.3% of the in-City truck miles—will be diverted to the East 91" Street MTS. This is not enough to significantly relieve waste-related traffic or pollution in the communities that currently house many of the private transfer stations that handle commercial waste. Thus, a new marine transfer station (MTS) to be built at East 91st Street in Manhattan will provide no relief to the overburdened communities in Brooklyn, Queens, or the Bronx. In addition, unlike the NYC Department of Sanitation (DSNY) trucks that use the latest pollution control technologies, 90% of the private trucks that carry commercial waste do not use this equipment. which is why they account for 93% of the pollution from waste collection and export.

**The SWMP is antiquated and focuses merely on waste transport rather than on reducing and recycling waste. Reducing tonnage will reduce the need for transfer stations. New York City lags behind other major United State cities in recycling rates. In the 2006 SWMP, the City committed "to achieving a 25% diversion of recyclables through its curbside program by 2007." Since then, a Local Law was adopted that increased the long-term recycling goal for residential waste to 33%. In 2012, PlaNYC set an interim goal to double the DSNY-managed waste diversion rate from 15% to 30% by 2017, further enhancing the prior year's local laws. Nevertheless, NYC's recycling rate for residential and municipal solid waste is still just 15%.

According to the Green City Index, New York City ranks 16 out of 27 U.S. and Canadian cities in recycling practice, leaving significant room for improvement.8 Indeed, the national average municipal solid waste recycling rate is 35% and Los Angeles boasts a 45% rate from its curbside recycling program.9 Rates in Europe are even higher - Austria and Germany both recycle more than 60% of their solid waste.10 If NYC recycled at the same rate as Los Angeles, it would save at least \$93 million annually in disposal costs and create new jobs in an important green industry. Increasing the City's recycling rate to that of Los Angeles would create 1,000 new recycling jobs.11 Thus, not only does NYC have the opportunity to save money and lighten the environmental burden of waste management, but it can also create jobs in the process.

■ By adding the East 91" Street MTS, the SWMP hurts a new community of low-income New Yorkers and

tens of thousands of children and seniors. The East 91st Street MTS in Manhattan has been promoted as a key step toward giving much-needed relief to communities in Brooklyn, Queens and the Bronx that have borne disproportionate portions of the City's current system of solid waste disposal. In reality, this MTS will not meaningfully reduce congestion or pollution in those overburdened communities. Additionally, it will exacerbate existing air-quality issues in East Harlem and Yorkville, communities already fraught with childhood asthma.

The new East 91st Street MTS site would be located directly next to the not-for-profit sports and recreation facility, Asphalt Green, where tens of thousands of children and seniors from around the City benefit from free life-saving and other physical education programs. In fact, the truck ramp to the MTS would cut Asphalt Green in half, with trucks running within 11 feet of the facility's playground, soccer field and front door. The MTS site also neighbors the Stanley Isaacs Houses, the John Haynes Holmes Towers and the Washington Houses, three New York City Housing Authority (NYCHA) developments that house 5,700 low-income residents, including approximately 1,590 children and 2,010 seniors.¹²

As a result, the East 91st Street MTS will instead harm a new and vulnerable set of New Yorkers in significant ways. It is the health of these populations that will be most at risk if the East 91st Street MTS is built and operated. A revised, truly modern waste management plan would protect ALL communities, including vulnerable ones like East Harlem and Yorkville, and would also ensure that people who are most sensitive to air pollution, such as children

and seniors, are adequately protected no matter where they live.

Unfortunately though, the East 91° Street MTS has become a symbolic touchstone in a political debate that ignores the cost and the very real community and environmental implications of building a large MTS in a densely inhabited neighborhood.

■ Costs for implementation of the SWMP have ballooned far beyond the original estimates. According to the Independent Budget Office (IBO), the construction and operation costs of the East 91st Street MTS are now projected to exceed more

Capital cost of the four MTSs has increased an astounding 265% and still growing.

than \$1 billion over the next two decades, which is more than \$600 million above the cost to manage the same waste using the current system (referred to by DSNY as the "interim plan").¹³ Recent construction delays, permits and zoning issues, and necessary retrofitting to protect the facility from future Sandy-like superstorms will only increase cost estimates even further.

As **Table 1** shows, the projected capital costs for the MTSs have grown dramatically since the SWMP was adopted in 2006. For example, the original projection of the capital construction costs to build the East 91st Street MTS was \$43.9 million. In 2009, that amount was revised to \$121.8 million. Today,

MARINE TRANSFER STATION	2002-2005 ESTIMATED CAPITAL COSTS (\$ MIVI)	2008-2009 ESTIMATED CAPITAL COSTS10 (\$ MIN) ¹⁴	2013-2014 PROJECTED CAPITAL COSTS (\$ MM)
East 91 st Street (Manhattan)	\$ 43.9 ¹⁵	\$ 121.8	\$ 181.616
Hamilton Avenue (Brooklyn)	\$ 46.017	\$ 116.5	\$ 171.018
North Shore (Queens)	\$ 58.419	\$ 112.2	\$ 191.920
Southwest Brooklyn	\$ 46.023	\$ 116.5	\$ 163.822
TOTAL	\$194.3	\$ 467.0	\$ 708.3

TABLE 1: Estimated Capital Costs of the SWMP's Marine Transfer Stations.

Executive Summary

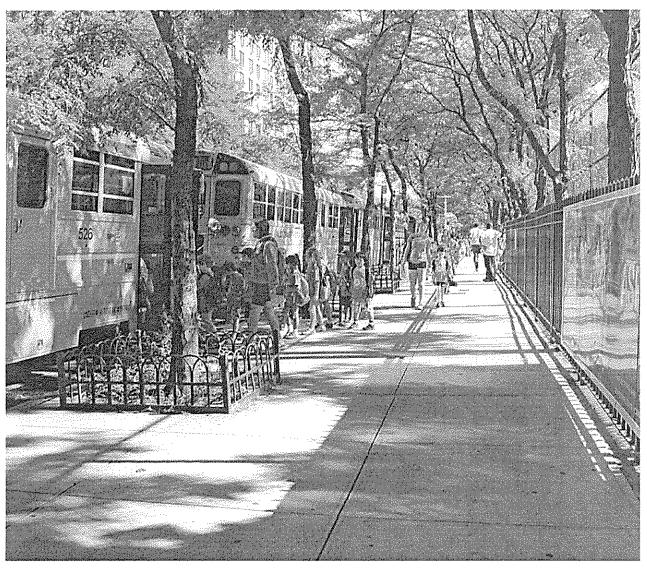
the City's contracts show that it will cost \$181.6 million and counting. In 2006, the capital budget for the four MTSs was \$194 million. That number has grown dramatically to \$708 million, according to the most recent DSNY budget – an astounding 265% increase. Also, this is a conservative estimate, as project delays continue and contracts still need to be finalized. This estimate also does not include any future costs for debt service or contingencies.

In addition to these capital costs, each facility must maintain operating and debt service costs. The IBO estimated that the East 91st Street MTS' annual bill would exceed \$22 million in operating costs and debt service.²³ As this is a burden carried at each facility, we can reasonably

assume that the City would pay nearly \$90 million every year (in current dollars) to merely keep the lights on at the four MTSs. More importantly, this adds a new cost to the City's budget, as the MTSs are not yet in operation.

Costs of the MTSs have increased significantly, even though the number of MTSs has decreased from 8 to 4.

Every ton of garbage that is transported through the East 91st Street MTS will increase the City's solid waste disposal costs beyond the current levels. According to



The East 91" Street MTS will harm the thousands of public school children that come to Asphalt Green for physical education and after school programs.

the IBO, in its first fiscal year (scheduled to be 2016), the cost to the City of operating this MTS will increase from \$15.7 million to \$41.5 million, equating to nearly \$26 million more than to continue to transport the trash out of the City the same way it is now. Over four years, this will be an extra \$106 million in taxpayer dollars²⁴ Presumably, the extra costs at this facility will be mirrored at the similarly designed (and delayed) Southwest Brooklyn MTS and in other SWMP components that have not yet been studied by the IBO.

■ Increasing the throughput at the East 91st Street MTS will only make an expensive project even more costly to our City's residents. If the 91st Street MTS is operated at its permitted residential refuse capacity of 720 tons per day rather than the 577 tons per day modeled in the IBO memo, projected first year costs of operating the MTS would increase by another \$1 million. This would bring the total to nearly \$27 million to operate compared to the current interim plan.²⁵

By suspending this project now and maintaining the interim plan while a more progressive and sustainable alternative is produced, the City would free up substantial, critically needed operating budget dollars immediately.

Simply stated, building the East 91st Street MTS will not significantly relieve truck congestion or pollution in the communities that are impacted by commercial waste carting now, but it will burden a densely inhabited neighborhood with vulnerable populations with increased pollution and traffic—and will cost the City hundreds of millions of dollars that would be better spent elsewhere. At a time of serious fiscal concern, the City should be investing in the most cost-effective solid waste strategies like reducing tonnage and recycling waste.

A Better Solution

Our approach will propel New York City to become a national and global leader in sustainable waste management. Mayor Bill de Blasio can make our City a progressive model for other major urban centers worldwide to emulate for generations to come.

New data summarized in this report will show that NYC can and should take necessary steps to dramatically reduce waste tonnage needed for disposal. This would decrease pollution created by the solid waste management processes that depend on a private fleet of heavily polluting diesel trucks and tugboats.



LIA NEAL Olympic Bronze Medalist

Lia Neal raced her way to a Bronze medal in the 4x100m Freestyle Relay at the 2012

London Olympics. She became the 2nd African-American female and first Asphalt Green swimmer to make a US Olympic swim team.

A Swim for the Future scholarship recipient, Lia has traveled from Brooklyn to her second home, Asphalt Green, for more than nine years. As a member of Asphalt Green she is noted for being a loyal teammate, a true friend, and someone who helps her teammates achieve their dreams too. Currently, Lia is attending Stanford University.

Lia has spoken out again the East 91" Street MTS, noting "I have been swimming and training at Asphalt Green since I was eight years old and it has become a second home to me. They have given me the opportunity to stay active and pursue my dreams. I wouldn't be where I am today without Asphalt Green, Don't let the East 91st Street dump take away the dreams of others like me."

Specific next steps to move this vision forward are:

- Create a new long-term solid waste plan that reduces the tonnage of the City's waste, increases the amount of recycling and composting, and takes advantage of emerging, sustainable waste-to-energy projects. The current SWMP actually furthers the City's reliance on trucking in fact, more than 90% of the City's solid waste-related truck miles are unaltered by the current SWMP.¹⁴⁰ A modernized new, sustainable solid waste plan should account for the needs of over-burdened communities and sensitive populations like children and seniors. It would also review the City's current commercial truck routes and suggest alternatives that reduce the impacts of the City's trucking on residential communities.
- The City should lead by example, and launch an aggressive recycling and composting program for all City schools and public agencies. With its pioneering

[&]quot;Based on the IBO memo's costs for the interim plan and 91" Street MTS option. This calculation assumes that total annual facility costs remain fixed and equal to the total facility costs in 2016 under the 577 tons per day scenario. Also, the export and transport fees were assumed to be constant on a per-ton basis. Thus, the additional costs of adding throughput are ~\$20 per ton. At 143 tons per day and 302 days per year, this works out to an additional 5806,000 annually. Adding this to the aforementioned \$26 million in incremental costs above the interim plan baseline yields an incremental cost of \$27 million.



Carol Tweedy, Executive Director of Asphalt Green, and Kelly Nimmo-Guenther, President of Pledge 2 Protect show former Council Member, Robert Jackson, where thousands of kids will cross the entrance ramp to the proposed E. 91st Street MTS.

use of recycled paper and purchases of natural gas and hybrid-electric sanitation trucks, the City has used its own purchasing power and resources to kick-start broader changes in the sustainability of solid waste management in the past. As a first step towards reducing the amount of solid waste that the City needs to transport to distant landfills, the City should commit to an aggressive recycling and composting program for all City schools and public agencies.

- Review and re-evaluate the plans to build the proposed Southwest Brooklyn MTS. Although the IBO has not studied cost escalations at locations other than the East 91st Street MTS, we are concerned that the other MTS projects may face similar cost escalations, since they are based on similar designs. In particular, the de Blasio administration and/or the IBO should review the current cost impacts of the Southwest Brooklyn MTS project before proceeding further.
- Suspend the plan to build the East 91st Street MTS. By suspending this project now and maintaining the interim plan while developing a more sustainable solid waste plan, the City would free up critically needed operating budget dollars immediately. According to the IBO, doing so would save \$26 million in the first fiscal year, \$106 million over the first four fiscal years of operation, and more than \$600 million over 20 years (now a projected cumulative cost of over \$1 billion).¹50 In the process, it also would avoid subjecting one of the City's most densely populated communities and the diverse users of one of the City's most valued sports and recreational facilities to significant negative environmental, safety and health impacts.
- Use the savings from the East 91st Street MTS and potentially other SWMP amendments to provide effective and timely solutions to communities in need of relief from pollution from the current waste management system. For example the City should consider

investing some of the savings into incentives that will help private carters retrofit or replace their trucks to ensure they comply with the new Local Law 145. Other cities and port authorities have had great success with programs that either subsidize or provide low-cost financing for the purchase of diesel particulate filters to accelerate their use, including the Port Authority of New York and New Jersey and a city program at the Hunts Point market. Successfully implementing this new law will reduce citywide particulate emissions from solid waste removal by 70% and will bring far greater air pollution relief to communities with truck garages, transfer stations, and truck routes than the current MTS strategy—or anything else in the SWMP.¹⁵¹

- Allocate portions of the savings toward critical housing, social services, educational and other programs. These could range from creating new after-school programs to improving, preserving or creating affordable housing for poor and working-class residents, to preserving and expanding open space like parks and playgrounds, and to expanding NYC's police force.
- Give waterfront access for East Harlem and Yorkville residents, expanding the services offered to NYC for

physical activity. Other than the small strip of parkland between the FDR Drive and the East River, these densely populated, residential neighborhoods have no open space or access to the waterfront. Over the past decade, formerly industrial waterfronts throughout the City have been reclaimed for park and open space, and have created jobs, economic opportunities and revitalized neighborhoods in every borough. It's time to consider improvements to this overlooked stretch of waterfront.

Our vision provides a more modern approach that would be far better for the City than moving forward with the 2006 SWMP, as currently amended by the prior administration.

We call on Mayor de Blasio to hit the pause button on implementing the 2006 SWMP and conduct an audit assessing the overall cost and the SWMP's progress to date—including goals not met and the new and changed conditions that affect its ability to achieve its intended objectives. We believe this will necessitate a revised SWMP that addresses the City's burgeoning waste management needs in a way that also respects and protects the health and wellbeing of our City's residents.

New York City Deserves a Smarter, Cleaner, More Cost-Effective, Sustainable Solid Waste Plan for the Future

ledge 2 Protect strongly supports Mayor de Blasio's policy goal of zero waste in New York.²⁶ New York City can and should develop a truly world-class solid waste plan. Such a plan should be built around the four-part hierarchy²⁷ as shown below in **Figure 1**, and should utilize various strategies used by progressive cities to handle their solid waste. Following this hierarchy would make NYC a global leader in solid waste management. Unfortunately, the 2006 SWMP flips the hierarchy and keeps NYC on a path that is the exact opposite of how a sustainable, long-term solid waste plan should operate.

Not only does the current path not achieve the goals of the SWMP, it also:

- Locks us into outmoded technologies and practices, rather than provide the flexibility to shift to more sustainable approaches as they emerge;
- Keeps us reliant on transfer stations, trucks and other modes of transport to handle the City's solid waste removal for decades to come;
- Continues to burden low-income communities and communities of color with dirty trucks and transfer stations; and
- Forces the City to waste billions of dollars in the process.

Source Reduction and Reuse

Source reduction and reuse are the most proactive and preferred strategies of the Waste Management Hierarchy. Source reduction, also known as waste prevention, means reducing waste at the source and can include reusing or donating items, buying in bulk, reducing packaging, redesigning products, and reducing toxicity. It is also important in manufacturing, as it involves the reduction of waste in the design, manufacture, purchase, or use of materials.²⁸

Many major retailers have undertaken initiatives to focus on reducing packaging waste, which help minimize wasted space and maximize cost-effectiveness in transport.²⁹ Reusing goods and materials reduces the need for landfill space and the environmental impacts associated with a landfill-based disposal system. In many cases, reuse supports local community and social programs while providing donating businesses with tax benefits and reduced disposal fees.³⁰

Recycling and Composting

New York City should be a national and global leader in recycling. In the 2006 SWMP, New York City committed "to achieving a 25% diversion of recyclables through its curbside program by 2007." Since then, the City has taken several additional steps to modernize and improve its solid waste disposal. In 2010, the New York City Council passed 11 Local Laws to update the New York City Recycling Law, which had only received marginal

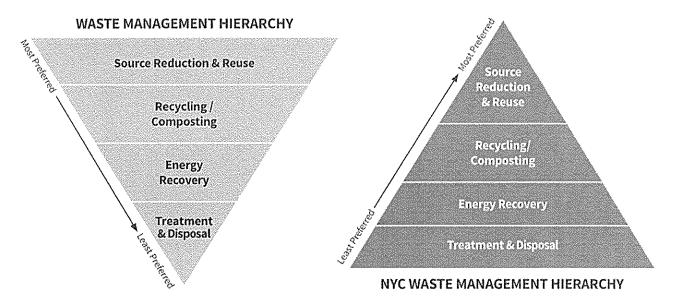


FIGURE 1: Comparison of the Preferred Waste Management Hierarchy (shown on left) versus P2P's representation of NYC's Waste Management Hierarchy.

	CURRENT SCENARIO IN NEW YORK CITY ¹²	SCENARIO USING THE NATIONAL AVERAGE ¹¹	SCENARIO USING LOS ANGELES'S RECYCLING RATE ³⁴
Current Recycling Rate	15%	35%	45%
DSNY - Managed Recycling (tons per day)	1,728.1	4,017.4	5,165.2
DSNY - Managed Waste (tons per day)	9,750.1	7,460.8	6,313.0
Annual Cost of Waste Management ³⁵	\$265 Million	\$203 Million	\$172 Million
Potential Annual Cost Savings	None	\$62 Million	\$93 Million

TABLE 2: MSW Recycling Rates Comparison between New York, U.S. National Average, and Los Angeles

revisions since it was originally enacted in 1989.36

Of these updates, Local Law 35 of 2010 requires DSNY to designate all rigid plastic containers as recyclable materials and to provide for their collection, which should increase overall recycling rates, especially now that the Sims recycling facility has opened at the South Brooklyn Marine Terminal.³⁷ In addition, Local Law 40 of 2010 updated the City's recycling goals, setting a 2020 goal of 33% recycling rate for DSNY-managed solid waste. In 2011, then-Mayor Michael Bloomberg updated the solid waste provisions of PlaNYC, the City's sustainability plan. In the 2011 revision, PlaNYC set an interim goal to double the DSNY-managed waste diversion rate from 15 to 30% by 2017, further enhancing the prior year's local laws.

Despite these ambitious goals, NYC's recycling rate for residential and municipal solid waste is still just 15%.³⁸ The national average MSW recycling rate in American cities is 35%, and Los Angeles recycles nearly 45% of their MSW.^{39,40} That's why New York City ranks 16 out of 27 in large US and Canadian cities in recycling. Even more, New York City's recycling rate pales in comparison to that of European leaders like Austria, Germany, and Belgium as **Table 3** shows.

The potential cost savings of a higher recycling rate could be substantial. As **Table 2** above demonstrates, if the City were to improve its recycling rate to the national average or to match the 45% rate reported by Los Angeles, it could save up to \$93 million per year.

There is even more potential to increasing recycling in

New York City: adding more recycling bins on City streets and offering more composting locations would help increase recycling rates. While these are worthwhile first steps, the City can and should do much more to increase its recycling rates up to the nation's average rate at a minimum, and should strive for the higher rates to be one of the nation's leaders.

Recycling also is smart job policy. According to the EPA, every 10,000 tons of solid waste sent to a landfill creates one job. However, that same waste diverted from landfills can create 10 recycling jobs or 75 materials reuse jobs. 45 Thus, increasing the City's recycling rate to that of Los Angeles

CITY / COUNTRY	MSW RECYCLING RATE
Austria	63%
Germany	62%
Belgium	58%
Seattle, WA	56%
Los Angeles, CA	45%
United States	35%
New York, NY	15%

TABLE 3: Comparing Global National Leaders in MSW Recycling Rates^{41,42,43,44}

New York City Deserves a Smarter, Cleaner, More Cost-Effective, Sustainable Solid Waste Plan for the Future

would create nearly 1,000 new recycling jobs. NYC has the opportunity to save money, lighten the environmental burden of waste management and increase jobs.

Composting is another way that the City can reduce its waste stream, save money, and contribute to a more sustainable, more progressive future. While PlaNYC committed the City to delivering 50% of its food waste from landfills, that commitment remains unfulfilled.⁴⁶ Portland, San Francisco, Seattle and Boulder all have impressive curbside compost pickup programs that should be considered for adaptation to NYC. During his campaign, Mayor de Blasio called for the creation of similarly successful programs in the City within five years.⁴⁷

Energy Recovery

"Waste-to-energy" is the term used for energy recovery processes that convert trash into consumable energy via combustion, digestion, fermentation or hydrolysis.⁴⁸ The output of the conversion process is the dramatic reduction in the amount of waste destined for landfill. It also generates electricity, steam, or biogas that can be used to further reduce the overall energy profile of the original waste stream.

Currently, the City diverts less than 10% of its residential and governmental garbage to waste-to-energy facilities.49 In response, former Mayor Bloomberg announced in March 2012 a redoubled effort to focus on energy recovery, specifically targeting waste-to-energy technologies. The City has conducted a three-phased study to outline potential technologies, establish priority locations for construction, and develop a list of recommended providers. 50,51,52 Although combustion (incineration) is the most widely used method, both in the U.S. and Europe, it is also fraught with the most environmental concerns due to emissions. As such, New York City mandated that combustion-based technologies would not be funded.53 The City then evaluated several different new and emerging waste-to-energy technologies, identifying those most likely to succeed for the City.

The City has yet to deliver any plans to take advantage of the safest, most sustainable waste-to-energy technologies. This delay is limiting the City from reaping the benefits of this technology. Benefits would include: reducing the costs of exporting waste, creating jobs in the environmental sector and creating a truly sustainable solid waste management system, as detailed in the CBC's recently published recommendations.⁵⁴ We encourage Mayor de Blasio to continue the process of finding new proven waste-to-energy technologies that support his zero waste policy goal.

Cleaning Up Commercial Trucks

Much has changed in the air pollution world since the SWMP was approved in 2006. Most significantly, new federal rules have come into effect that require new truck engines to emit 90% less particulate matter (PM) than pre-2007 engines. Today, highly effective diesel particulate filters (DPFs) that enable diesel engines to meet this goal are standard equipment on new truck engines. A New York City local law accelerated the adoption of this technology in the DSNY fleet, but not in the fleet of private trucks that collect and transport the City's commercial waste.

An immediate and key short-term objective that the de Blasio administration must take is the cleanup of the private trucks that carry commercial waste. Unlike the 97% of DSNY trucks that are equipped with DPFs (the other 3% operate on Compressed Natural Gas (CNG)),⁵⁵ the commercial garbage trucks are older and 90% of them pre-date 2007. As a result, they are not equipped with particulate filters⁵⁶ and are subsequently responsible for 93% of the overall pollution from solid waste removal in NYC.⁵⁷

At the end of 2013, the City adopted its first major revisions to its Air Code in a generation, Local Law 145 of 2013 requires these private trucks to reduce emissions by using the best available emission-control technologies by 2020. This will require the use of particulate filters or comparably effective technologies.58 Pledge 2 Protect testified in support of this law in the City Council to the effect that implementing this requirement will reduce pollution in every neighborhood that produces or receives commercial waste in the City, including the low-income communities and communities of color that house many of the transfer stations today. Further, this approach will provide greater, faster and more cost-effective air pollution relief than anything proposed in the SWMP, including the current plans to build and operate the MTSs.

Implementing Local Law 145 will reduce overall truck particulate emissions by 70%; far surpassing any truck mileage reduction benefits outlined in the 2006 SWMP.

As a New York City Council Member, Mayor de Blasio introduced legislation that targets sanitation truck idling.⁵⁹ We believe that NYC should go even further

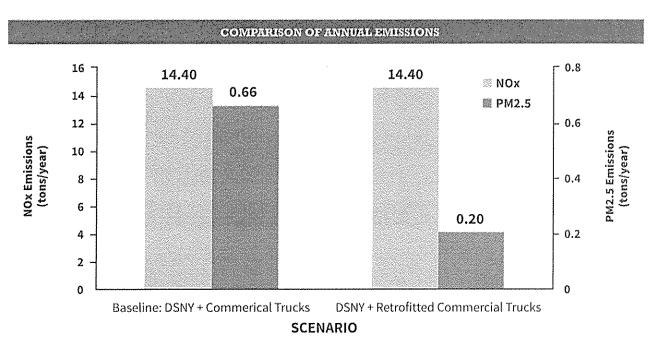


FIGURE 2: Comparing today's DSNY and commercial trucks with a future fleet of clean DSNY and commercial trucks.

and eliminate emissions at their source. Local Law 145 is an important victory for cleaner air in the City. Based on a DSNY estimate, 60 at a cost of \$20,000 per truck, the overall cost of retrofitting the older, dirtier trucks with DPFs would be \$77.4 million. This is roughly equivalent to 13% of the potential \$600 million total in cost savings if the East 91st Street MTS project does not go forward. Providing low-cost financing (rather than a direct subsidy) is another lower-cost way to accomplish the same goal. In fact, this approach was successfully used by the Port Authority of New York and New Jersey to accelerate the cleanup of dirty trucks at the Ports of Newark and Elizabeth, and is currently being used by the City at the Hunts Point market.

Some truck owners might choose to replace their trucks with newer models that also provide greater fuel economy, improved reliability, lower noise and other positive features. Doing so would increase the costs, but also provide greater benefits to the trucking fleets and to the City. A recent analysis suggested that replacing all of the private trucks carting commercial waste would cost \$571 million.⁶¹ In reality, the true cost is likely to be somewhere in the range of \$77.4 million to \$571 million. Some firms would choose to simply retrofit their existing trucks with filters and others would choose to retire their older trucks and replace them with newer models.

The emissions benefits of this step will be dramatic. As

shown in **Figure 2** above, if Local Law 145 is implemented as written, fleetwide particulate emissions will drop by 70%, compared to today's baseline of dirty trucks. ⁶² This will provide far greater emission reductions to the communities overburdened by the current system than any small reduction in truck miles associated with building all of the MTSs combined.

Unfortunately, cleaning up private trucks that carry commercial waste will not eliminate the concerns of communities that live with trucks rumbling through their neighborhoods. Unlike the City's system of residential waste removal, New York's commercial waste removal is an uncoordinated array of carting companies and routes, where a single block with five restaurants could have five different haulers, each with its own truck, picking up waste nightly and taking it to five different transfer stations. To minimize the impact of collecting the City's commercial waste, truck routes through residential neighborhoods should be limited and streamlined.

By implementing the strategies outlined in this section, NYC will reduce its overall solid waste tonnage, thereby reducing the need to build extra MTSs to process waste. These strategies will provide benefits to all New Yorkers; especially the communities that currently house the City's transfer stations and truck routes. In addition, NYC will see a reduction in the overall cost of removing garbage that should not exist in the first place.

Managing Two Waste Streams: Residential and Commercial Waste

rom its earliest days, New York City has struggled to effectively manage and dispose of its solid waste. Most recently, after the closing of Fresh Kills in Staten Island in 2001, City officials and advocates struggled to create a long-term approach to solid waste disposal that would replace the City's truck-based system for removing residential and commercial trash. (See, Figure 3: Types of City Waste, below.)

The City maintains two approaches to handle its putrescible waste (i.e., decaying waste). First, the DSNY collects 3.8 million tons of putrescible waste generated by government agencies, residential buildings and non-profit organizations located on tax-exempt land annually (this is referred to as "residential" or "municipal" solid waste and is abbreviated as "MSW"). Second, a network of more than 200 private waste-carting companies pick up 3.9 million tons of putrescible waste from office buildings, restaurants, grocery stores and other businesses annually (this is typically referred to as "commercial waste"). All of this waste—whether diverted for recycling or destined for landfills—is transferred at one of 17 residential or one of the dozens of commercial waste transfer stations in place throughout New Jersey, the

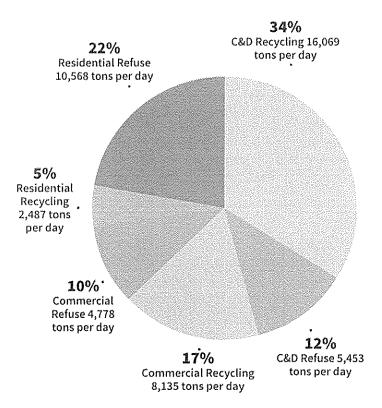


FIGURE 3: Comparing Recycled and Non-recycled Residential, Commercial, and C & D Refuse in New York City.

Bronx, Brooklyn and Queens. 54,65

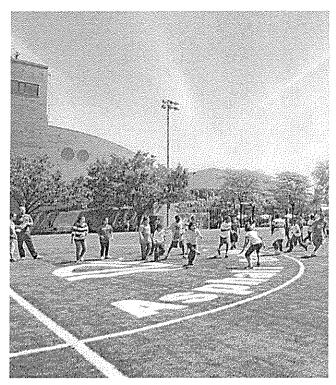
Commercial waste and the companies that cart it are regulated by The Business Integrity Commission (BIC), which was created to regulate and set price caps for commercial waste removal. These private carters own or operate roughly 4,300 trucks that travel throughout the City to collect this commercial waste and deliver it to private transfer stations. Generally, these trucks are housed near the transfer stations they use, because it lowers operating costs for the carters (i.e., gasoline time and maintenance). This has created a network of transfer stations and garages that are primarily located in industrial or former industrial neighborhoods in New Jersey, Brooklyn, Queens and the Bronx. These private businesses compete on the basis of price, resulting in a "race to the bottom" to attract and keep business, which has led to serious concerns about labor and environmental standards in the industry.66

Separately, the BIC also regulates the nearly 700 private waste carters that own or operate an additional 4,065 highly polluting trucks that handle the 6.5 million tons of non-putrescible waste generated in the construction and demolition of buildings and other infrastructure (typically referred to as C & D).67

Key Components of the 2006 Solid Waste Management Plan

In 2006, the City adopted the SWMP, which aimed to establish a "cost-effective, reliable, and environmentally sound system for managing the City's waste over the next 20 years." The SWMP had a number of laudable priorities, including the recognition of the environmental concerns and the need for continued innovation. As such, the SWMP established the following list of principles: 69

- Recognize the environmental issues surrounding waste
- Treat each borough fairly
- Rely on sound business principles to increase efficiency and reduce cost
- Be realistic and be able to be implemented quickly
- Look forward, allowing for future innovation
- Be reliable
- Be built collaboratively
- Maintain service standards



City regulations would prohibit a private operator from locating an MTS this close to public park or school.

Unfortunately, in terms of the fair treatment of all boroughs, the plan was woefully insufficient on an aggressive reduce, reuse, recycling effort which would have significantly decreased tonnage and helped all communities citywide. Even though the SWMP included a number of studies and other measures to begin to understand and address commercial waste issues, it did not include sufficient steps to fundamentally resolve the longstanding issue of the City's commercial waste removal, leaving neighborhoods in Brooklyn, Queens, and the Bronx without a real solution to their concerns about this waste.70

The SWMP instead focused on building upon the City's existing solid waste infrastructure through the increased use of marine transfer stations and other infrastructure, rather than implementing a truly modern, sustainable vision. With the SWMP's emphasis on marine transfer stations (a concept that originated in the Giuliani administration, when the discussion to replace the Fresh Kills landfill with a series of MTSs first began), the East 91st Street MTS has taken on symbolic value, as discussed further in the report. It incorrectly symbolizes "Rich East Siders" sharing the burden with the rest of us. Unfortunately, it is a false symbol of all boroughs sharing the pain. That misrepresentation lacks any further vision of sustainability—and it will

not significantly even help the Brooklyn, Queens, and Bronx neighborhoods, which the Bloomberg administration claimed to be helping.

The SWMP had the correct concept of a five-borough plan as it tried to address how the management of NYC's waste disproportionately harmed different communities. However, through its oft-delayed implementation and the City's failure to recognize changed conditions (discussed below), the City finds itself in a situation today where many of the original goals of the SWMP have not been met, despite enormous increased cost to the City both in capital dollars and operating expenses.



Since (1972), koji jainie Holinson (jas been a tenant of the NYCHA Stanley Isaacs & Holmes Houses, home to more than 2,200 low-income

residents. This five-building community is located one block from the proposed East 91street MTS.

When the previous MTS was in operation, Lorraine suffered greatly from asthma and recalls several trips to the hospital for treatment. Since its closing in 1999, her health has improved significantly. Lorraine no longer has to undergo regular treatment for her asthma – no more nebulizer pumps, steroids, or other extreme treatments.

"I lived here when the previous MTS was open, and now I fear it's opening again," she says. "I have nightmares. I am overwhelmed with what is going to happen if the MTS comes back." When you ask Lorraine to describe the living conditions before it closed, she tells you about the horrible smell, the rats, and the traffic. "When it closed, you could finally smell the fresh bread baking at Eli's!"

Lorraine is very concerned about the children, families and senior citizens who are her neighbors. "Moving from the neighborhood is not a choice we can afford," she says. "Forty-five percent of our residents are senior citizens, and their health is more vulnerable to the effects of the trucks." The Stanley Isaacs & Holmes Houses have received designation from the City as being a Naturally Occurring Retirement Community and as one of those senior citizens, Lorraine Johnson wants to ensure that her voice is heard, "Elected officials cannot call building the East 91" Street dump 'environmental justice' when Stanley Isaacs & Holmes is just a few hundred feet from the dump," she says. "Is it justice to put a dump on top of us?

2006 SWMP Does Not Meet Stated Goals

The Principles of the SWMP Have Not Been Met

Since the SWMP was passed in 2006, many of its principles have not been met—and will not be met if the SWMP is implemented as currently planned. Examples of how the SWMP is not on track to meet its goals are shown in the chart below.

PRINCIPAES OF THE SWMP	HOW SWMP FAILS TO MEET PRINCIPLES
Recognize the environmental issues surrounding waste.	In fact, the SWMP exacerbates environmental issues. It keeps trucks rumbling through neighborhoods of Brooklyn, the Bronx and Queens and it will increase the pollution severity of an already existing hotspot in Yorkville and East Harlem, especially at Asphalt Green where 34,000 children from around the City play.
Treat each borough fairly.	Despite the symbolic placement of an MTS at East 91st Street in Manhattan, implementing the SWMP will not fundamentally improve borough fairness—and it will not significantly shift the commercial waste transport from the status quo. First, even if the MTS strategy is fully implemented, the SWMP does not require the private trucks that carry commercial waste to shift from their current transfer stations to the new MTSs. Second, even if the East 91st Street MTS is built in Manhattan, its permitted capacity will only enable the diversion of 1.3% of the truck miles associated with commercial waste—not enough to alter truck traffic or pollution in the neighborhoods overburdened with commercial waste. Third, the SWMP does not alter commercial truck routes, so neighborhoods with heavy truck traffic will continue to carry this burden. Fourth, as Manhattan's residential waste does not go to any other borough, there will be no relief to the overburdened communities in Brooklyn, Queens or Bronx. Manhattan's residential waste goes to disposal sites in New Jersey or Yonkers.
Rely on sound business principles to increase efficiency and reduce costs.	Costs have ballooned far beyond anticipated levels. For example, the East 91st Street MTS will cost taxpayers an additional \$26 million in the first fiscal year of operation and \$106 million over the first four fiscal years of operation. This will eventually add up to over \$600 million more than the status quo on an outdated and expensive approach to solid waste, siphoning finite resources from higher priorities in the City budget. The City should review potential cost escalations at the SW Brooklyn MTS before proceeding further with that proposed project, as it is likely facing similar cost increases.
Be realistic and implemented quickly.	The SWMP as initially planned and approved has already fallen apart. Eight years after its adoption, critical assumptions about cost, availability of landfills, and recycling rates have been shown to be wrong, and major components of the SWMP, such as the MTS at Gansevoort and the MTS at West 59 th Street, have been scrapped or delayed.
Look forward, allowing for future innovation.	The SWMP fails to implement sufficient strategies for future sustainability, including source reduction, recycling and composting and waste-to-energy technology.
Be reliable and maintain service standards.	It increases the number of facilities in flood-prone areas that have proven to be at high risk of another Sandy-like super storm, including the East 91st Street MTS.
Be built collaboratively and address the concerns of the communities near the transfer stations.	There was no collaboration with the surrounding communities of the East 91st Street MTS to address the real impacts and concerns of a garbage transfer station being located next to public housing and Asphalt Green where 34,000 children play or in a densely populated community.

TABLE 4: Goals of the SWMP and How They are Not Met

Key Economic Conditions of the SWMP Have Not Proven True

Since the SWMP was first adopted in 2006, key economic assumptions underlying the plan have changed significantly, resulting in dramatically increased costs for the proposed East 91st Street MTS and other facets of the plan. Recent events like Superstorm Sandy (as discussed below) should spur the City to conduct an audit of the SWMP in order to truly meet its original goals.

ASSUMPTION BY DSNY	ERROR IN THE ASSUMPTION	IMPACT ON COSTS
Transport by barge and rail will be more cost-effective than tractor-trailer.	Landfills with on-site rail connections are more than 400 miles away. ⁷³ Barge transport will increase costs further.	Because of incorrect cost assumptions and changed conditions, the costs will be much larger than predicted. Disposing waste at the East 91 st MTS is expected to cost \$238 per ton. The interim plan is projected to cost \$90 per ton at the time of operating in 2016 to move the same waste. ⁷⁴
In 2007, the City estimated a cost of \$545 million for the SWMP's required overall waste disposal infrastructure, with the first facilities operational by 2010.75 The SWMP's infrastructure consists of the marine transfer stations, proposed recycling facilities, truck garages, and other brick-and-mortar expenses.	Key components of the SWMP infrastructure are years behind schedule, resulting in much higher costs. The Southwest Brooklyn and East 91st Street MTS projects have not been constructed. The Gansevoort MTS is rescheduled and projected to be operation in FY2017 (without any final sign-off or designs) and using West 59th Street for C & D waste will not open until Gansevoort is operational.	Costs for overall SWMP infrastructure were already 78% - or \$426 million - over budget as of May 2012, according to the CBC.78 This is certainly a conservative estimate, as project delays continue, contracts still need to be finalized, and this estimate does not include any future costs for debt service.
Landfill capacity is dwindling, requiring that waste be shipped longer distances.	Assumptions about landfill capacity constraints have not been realized.	Because capacity constraints have not occurred, landfill costs are lower than expected. Local landfills in New Jersey are accepting waste at sub-\$70 per ton tipping fees, significantly cheaper than rail export fees that average \$110 per ton.79
The East 91st Street MTS will receive 720 tons per day from Manhattan Community District 5, 6, 8, and 11.	The IBO has estimated that the FY 2011 observed collections for the four community districts was only 577 tons. ⁸⁰	Because the the previous administration misestimated the amount of waste being collected, savings will not be realized. Receiving less than expected tonnage results in wasted capacity and higher per-ton operating costs.
The City will achieve 25% diversion of recyclables through its curbside program by 2007.	As of July 2013, the City is only recycling 15% of its residential waste.	NYC's recycling rate remains pitifully low compared to other U.S. cities and Europe. Recyclables cost \$69 per ton for metal glass and plastic and generate revenue of \$12 per ton for paper and cardboard. If recyclables are not diverted, they will be processed in the waste stream at costs of between \$65 and \$140 per ton.

TABLE 5: DSNY Assumptions, Errors, and Impacts on Costs

2006 SWMP Does Not Meet Stated Goals

The SWMP Does Not Meet Equity Goals

The 2006 called for the "responsibility for the City's waste management system [to] be allocated equitably throughout the City, in each of the five boroughs" a goal often referred to as "borough equity."

Unfortunately, with the way the SWMP is currently being implemented, it will fail to reach this goal - and it will actually cause harm to yet more vulnerable populations. This is because:

- The East 91st Street MTS will not provide meaningful relief to communities in Brooklyn, Queens or the Bronx. In fact, this facility has the potential of diverting a maximum of only 1.6% of the commercial garbage as compared to the total waste stream, which might pass through Brooklyn, Queens or the Bronx—and nothing guarantees that any of this commercial waste will actually be diverted.
- Marine transport, which uses tugboat-driven barges, does not meaningfully reduce long-haul truck

- miles (a paltry 0.3% reduction), and the planned diversion of only a small portion of the City's putrescible commercial waste stream to the East 91" Street MTS would eliminate only 1.3% of the in-City truck miles of the solid waste system.⁸² The impact to any overburdened community in Brooklyn, Queens or Bronx will be imperceptible.
- The companies that cart commercial waste will not be sufficiently incentivized to bring waste to the East 91st Street MTS, which is out of the way and not located close to their garages. Simply put, it will be cheaper for them to continue current practices, unfortunately changing nothing for boroughs outside Manhattan.
- Two major components of the SWMP—the MTS at Gansevoort^v and the MTS at West 59th Street^{vi}—have been delayed, which impacts the City's ability to increase the amount of waste that is diverted for recycling, as well as the City's handling of construction and demolition debris. As these facilities are meant to function interdependently, the integrity of the

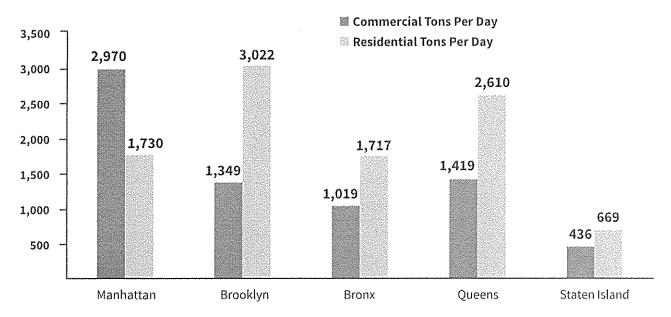


FIGURE 4: Commercial vs. Residential Putrescible Waste Generation by Borough

^{*}The SWMP includes the development of a new MTS on the Gansevoort Peninsula in Hudson River Park for the receipt of DSNY-delivered, Manhattan-generated paper, metal, glass, and plastics that are recyclable; the facility also would include an environmental education center. This MTS was authorized by the New York State Legislature in 2008, and DSNY solicited firms to design the new facility in 2010. According to the July 2012 DSNY Technical Review Memorandum, which updated the environmental review of the SWMP and reported on progress implementation, design and environmental review is slated to be completed by early FY2014, a three-year construction project would follow, and the MTS would be scheduled to begin operating in FY2017.

[&]quot;The SWMP also includes a newly designed facility at West 59" Street to process commercial construction and demolition (C & D) waste. A City 2007 Request for Proposals sought a two-phased approach to using the site. First, the facility would transfer both commercial waste and recyclable paper. This phase would continue until the Gansevoort MTS was operating. In the second phase, the West 59th Street MTS would transfer an additional quantity of commercial waste. However, it was ultimately determined that space limitations and dust from the C & D would make transferring both C & D and recyclable paper at the same infeasible. As a result, the use of this facility for C & D waste has been deferred until the paper operations can be moved to Gansevoort.

SWMP has already been compromised.

- Toxic emissions from the tugboats used to push the garbage barges up and down the East River between the East 91st Street MTS and Staten Island will actually increase nitrogen oxides emissions throughout the City. This will help exacerbate chronic summertime smog levels through the City and the region, as discussed in detail later.
- The East 91st Street MTS will increase the pollution exposure for a large number of children and seniors, populations that are particularly sensitive to its health impacts, without providing any material relief to the communities who have long needed it.

Managing the City's waste is a citywide issue and each borough should be treated fairly. In achieving that goal, one must take into account the unique nature of how - and by whom - Manhattan's commercial waste is generated. On

a typical day, as shown in **Figure 4**, Manhattan generates 41% of the City's commercial putrescible garbage – almost 3,000 tons out of roughly 7,200 tons. However, 52% of Manhattan's population on a typical day is comprised of non-Manhattan residents, including commuters (many from other boroughs), visitors and tourists, who generate a large portion of Manhattan's commercial trash.

More specifically, every business day, Manhattan's net population increases by roughly 1.63 million people; 1.61 million commuting workers, 404,000 hospital patients, and 70,000 commuting students. As **Figure 5** demonstrates, this total influx of people adds to the solid waste tonnage of Manhattan while other boroughs lose hundreds of thousands of residents who commute into Manhattan every morning.⁸³ As a result of this huge movement of people every day, more commercial waste is generated in Manhattan than in other boroughs; in short, much of Manhattan's commercial waste is not created by Manhattan residents.

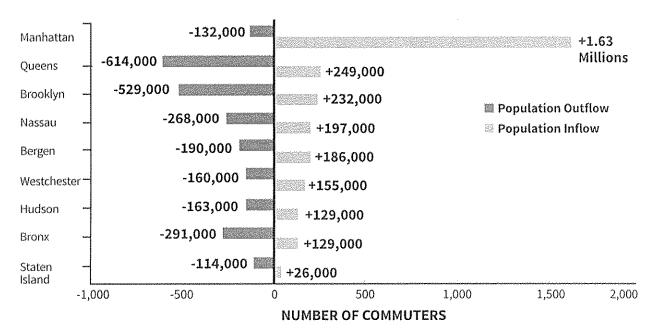


FIGURE 5: Weekday Commuting Flows by County/Borough 2009

Rescalating SWMP Costs Will Burden the City for Decades

The Estimated Costs of the East 91st Street MTS Have Ballooned to Over \$1 Billion

he costs of building and operating the East 91street MTS have ballooned since it was approved in 2006, which will take precious financial resources away from other needed social services and burden the City for decades. Key contributing factors include: construction delays; incorrect assumptions regarding the local availability of landfills; overestimations of residential waste generated in Manhattan Community Districts 5, 6, 8 and 11; missed goals for citywide recycling rates; increased financing costs for the waste disposal contracts with Covanta (which has a 20-year contract to accept waste from the East 91street MTS); and increased transport and tipping costs per ton of garbage.

The capital costs of constructing the facility have increased nearly fourfold since the original estimate of \$43.9 million in 2002—to more than \$181 million as of 2012. ^{84,85} This presents a new cost to the City's budget, as there is no current need to pay for the MTS' operating costs. Moreover, in May 2012, the IBO estimated that the East 91st Street MTS would cumulatively cost in excess of \$1 billion over 20 years. ⁸⁶ This is more than \$600 million

East 91st Street MTS will cost in excess of \$1 billion over 20 years; \$600 million more than current system.

more than the status quo to export waste from just four of twelve Manhattan Community Districts. The IBO also concluded that in the first year of the East 91st Street MTS's operation, the cost of exporting garbage would be \$238/ton compared to \$90/ton by maintaining the City's interim plan, as shown in **Figure 6** below.

These costs will have immediate budget impacts. Indeed, by maintaining the interim plan for the next four years while the City implements a more sustainable solid waste plan, the City would save \$26 million in the first fiscal year that the East 91st Street MTS would have been in operation (projected to be 2016) and \$106 million over the first four fiscal years of operation. In addition, the City would save about \$20 million on construction costs during FY 2014.

Furthermore, these extra costs are solely to dispose of the waste from just four districts of Manhattan. The remaining eight districts will continue with interim plan of waste disposal indefinitely. If these cost escalations were also discovered at the Southwest Brooklyn MTS, as described below, the overall extra costs to the City budget would be far higher. The de Blasio administration should assess and review the latest cost estimates for both facilities and for the entire SWMP before proceeding any further.

Additional construction delays, retrofitting needed to protect the facility from future Superstorm Sandy-like storms and the likely need to financially incentivize commercial carters to bring waste to East 91st Street

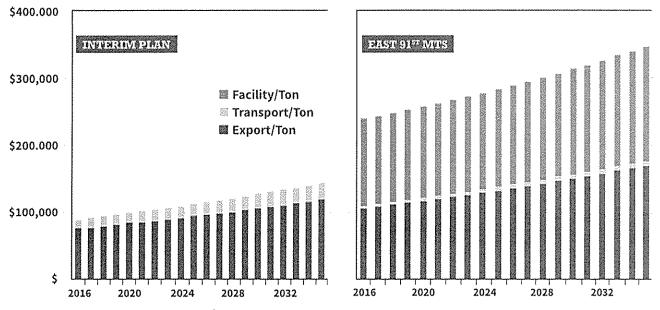


FIGURE 6: Comparing the annual costs for removing waste from CDs 5, 6, 8 and 11, under the Interim plan and the MTS plan.



Asphalt Green has 'waterproofed' over 30,000 public school children by teaching them water safety and how to swim

(see below) will continue to increase overall costs. Given all of the other factors that have changed since the SWMP's approval—and that have compromised the plan's ability to achieve its objectives—this is an investment that requires an audit, a new cost-benefit analysis and updated figures to be submitted to the NYC Council and the NYS Department of Environmental Conservation as a part of a SWMP modification.

Southwest Brooklyn Costs and Benefits Need to be Assessed and Analyzed

The proposed Southwest Brooklyn MTS would transfer waste from four Brooklyn districts that is currently driven to the IESI-50th Street MTS in the South Brooklyn Marine Terminal near Sunset Park, (two districts), to Jersey City (one district), and to the WM-Varick facility in East Williamsburg, Brooklyn (one district).

The Southwest Brooklyn MTS would be adjacent to a commercial marina and would require the installation of a king pile wall to protect the marina from tugboat wakes. The

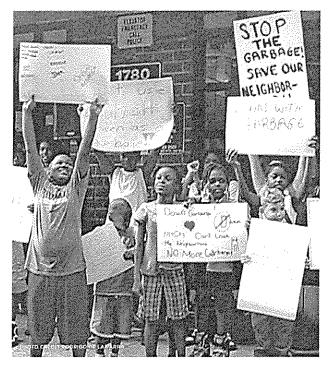


TENIELLE MACK Waterproofing program, resides in Harlem

Mack what she dreams about now that she has joined Asphalt Green's Swim School, she responds with confidence "I want to be in the Olympics!"

Tenielle began swimming at Asphalt Green in its Waterproofing program. She excelled among her PS 125 classmates in Harlem and earned a scholarship to the Swim School. Her public school had no physical education classes before becoming a partner with Asphalt Green. Tenielle says, "I never had the opportunity to go to a center like Asphalt Green. It gives me experience in different sports, especially swimming, which takes me to different places."

2 Escalating SWMP Costs Will Burden the City for Decades



Residents of Holmes and Stanley Isaacs say NO to the MTS.

facility is also close to a children's amusement park, and neighborhood advocates have voiced concerns about impacts to the neighborhood and marine environment from the dredging, construction and operation of the facility.

Unfortunately, an official review or independent budget analysis of the cost to building and operate the Southwest Brooklyn MTS has not been conducted. Ballooning costs at the East 91st Street MTS raise the question of costs at the Southwest Brooklyn MTS, since they are similar designs and on similar timetables. Before proceeding further with this project, the City or the IBO should review this project fully, including providing new estimates of the cost and timetable for construction and the expected costs of operation, debt service, and any other foreseeable capital and operating costs.

Subsidizing or providing financial incentives to private haulers to use East 91st Street MTS would make an expensive project even more expensive.

Using the East 91st Street MTS Will Increase Costs for Fleets that Collect Commercial Waste

Shifting from transfer stations in Brooklyn, Queens or the Bronx to the East 91street MTS will increase the costs for the fleets that choose to use it. As described in **Table 6**, the projected tipping cost at the East 91street MTS is projected to be \$159.87. In contrast, the average cost of removing waste citywide is projected to be roughly \$95 per ton. Thus, tipping commercial waste at the East 91st Street MTS may cost trucking firms \$64.87 more per ton than the average citywide disposal cost. In addition, the out-of-the-way location of the East 91st Street MTS will increase driving time for the drivers, which will result in still higher costs for the trucking firms.

воколен	TRANSPORT FEE/ TON ⁸⁹	LOV ₀₀ ARELAMINDA	EXPORT FEE / TON ⁹¹	TOTAL TIPPING FEE/TON
Manhattan (E. 91 ^x St. MTS)	\$3.23	\$49.92	\$106.72	\$159.87
Citywide	Bu	ílt into Total Tipping Fee /	Ton	\$95.0092
		iired Subsidy Amount Manhattan and Citywide)		\$64.87

TABLE 6: Illustrating the difference in tipping fees between Manhattan and Brooklyn.

East Harlem and Yorkville is Not the Stereotypical Upper East Side

ontrary to conventional wisdom, the proposed East 91st Street MTS site is not a neighborhood of townhouses, limousines and wealthy residents. As shown in Figure 7, the reality is that the East 91st MTS will be located on the border of East Harlem and Yorkville, directly next to Asphalt Green, a public sports and fitness facility with over two million visits per year, and adjacent to two New York City Housing Authority (NYCHA) developments—the Stanley Isaacs Houses and the John Haynes Holmes Towers which house thousands of low-income residents. A few blocks further away is the Washington NYCHA development. Altogether, 5,700 residents live in public housing close to the East 91st MTS site.

According to the City's zoning maps, this MTS site is in one of the most densely populated residential communities in all five boroughs. As **Table 7**, which compares the demographics of all the planned MTSs in the SWMP, shows, there are 62% more people of color and public housing residents that live within a quarter mile of the East 91st Street proposed location than all other planned MTS locations combined. In addition, 14% more children are living within a quarter mile of the East 91st Street MTS site than all other sites combined. The children of bordering East Harlem, 18% of whom were reported to have asthma in 2003, will be particularly vulnerable to the increased diesel emissions if this MTS is built.⁹³

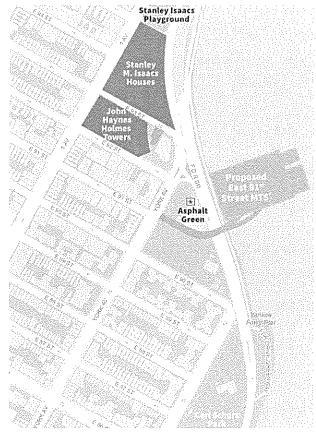


FIGURE 7: Map of MTS neighborhood

MARINE TRANSFER FACILITY	Standiskii	Veriginino.	MINORITY RESIDENTS	SCHOOLS	RELIGIOUS ESTABLISHMENTS	RECREATIONAL ESTABLISHMENTS	ACRES PARES, RECREATIONAL & BUCE/PED PATHS	PUBLIC HOUSING UNITS
East 91st Street	22,056	1,059	6,755	6	3	4	10.64	1,173
Southwest Brooklyn	2,778	148	1,432	2	3	2	2.19	0
North Shore Queens	661	38	477	1	0	2	0.16	0
Hamiliton Avenue, Brooklyn	2,312	86	1,408	0	1	3	1.92	0
Gansevoort, Chelsea	4,677	176	828	1	0	1	3.88	0
West 59th Street, Manhattan	6,873	335	4,164	3	0	1	5.23	33
Review Avenue, Brooklyn	360	17	297	0	0	0	0.00	0

SOURCE: United States Census - 2010; New York City PLUTO (The Primary Land Use Tax Lot Output) Data Files - 2012

TABLE 7: Socio-Demographic and Land-Use Data in the 1/4 - Mile Cirle around the Marine Transer Facilities in New York City



East 91st Street MTS Harms the Very People that the SWMP was Designed to Protect



JUSTICE CARRENARD

Ten-year-old Justice Carrenard knows that swimming will take him far; he's already thinking about a college scholarship. Now

a fifth grader at the Alexander Robertson School, Justice is in his fourth year on the Asphalt Green swim team as a scholarship recipient. "Ever since I became a team member in September 2010, Asphalt Green has been a second home to me. As a second home, I have also come to have a second family." For now, he says that swimming keeps him focused and sharpens many of his other life skills: "I've improved my math. I'm always counting when I swim; adjusting equations based on the lengths we're swimming." Justice has earned high honors and received his school's Citizenship Award for Excellence in Character.

"I spend almost 30 hours a week at Asphalt Green," he says. "I do homework here; I eat here; I play with my friends here; and I swim here. Asphalt Green is not only a facility, but a family center with great things happening here, and producing phenomenal athletes and people in general. My hope is that there will not be a garbage station here, so that all of us can realize our passions in a safe and healthy home and backyard."

Asphalt Green's Services to the City's Most Vulnerable Will be Compromised

Asphalt Green is one of the City's sports and recreation jewels. This non-profit organization is a public-private partnership with the NYC Department of Parks and Recreation, and it provides opportunities to economically disadvantaged children to engage in a wide array of programs and to learn skills that can be applied to creating healthier lifestyles and improving academic performance. Today, 34,000 children use the playground, pool and soccer field and participate in a wide range of sport activities at Asphalt Green every year.

More than 52% of the people served by Asphalt Green are from low-income families of color who use its programs and facilities without paying any fees—the vast majority of them live in East Harlem and other neighborhoods that lack alternative sports and swimming facilities. 4 Opening the East 91st Street MTS would impact their health and place an additional barrier for thousands of East Harlem and public school children to accessing programs and services that are currently a vital part of their learning, health and sense of community.

The building and the operation of the East 91st Street MTS will lead to a reduction of program enrollment for fee-paying members who would be rightly concerned about the negative impact of increased diesel pollution and traffic. This would result in reduced revenue to fund the free programs offered to low-income children from East Harlem, Harlem and the South Bronx. **Table 8** is a

PROGRAM NAIVIE	PROGRAM NAME	GOAL	RESULTS ACHIEVED
Waterproofing Program	Offers free swim instruction and a water safety program to New York City public school students.	Confronts childhood obesity and drowning.	30,000 low income students now have life-saving and swimming skills
Recess Enhancement Program	Makes recess a fun and cooperative time, in which students can engage in physical activity.	Targets schools where a majority of students receive free or reduced price meals. Seeks to make physical activity an educational tool for students.	Program includes 60 public elementary schools in low- income neighborhoods.
Community Sports Leagues	Makes recess a fun and cooperative time, in which students can engage in physical activity.	Teaches leadership, teamwork and builds self-esteem.	625 Harlem students from 12 public schools enrolled this year.

TABLE 8: Asphalt Green Programs

description of these programs and the amazing results achieved in positively impacting these children in need.

Asphalt Green also serves a large population of seniors who are more vulnerable to diesel pollution than other adults. Almost 1,000 senior citizens are regular users of the facility and about 350 seniors are a part of free services provided by Asphalt Green's outreach programs.

New York City has been a strong partner in building Asphalt Green to what it is today. It has invested over \$20 million in capital improvements to Asphalt Green and the facility has raised more than \$30 million from foundations, corporations and individuals to ensure that it continues to provide services to New Yorkers of every demographic. As shown in **Figure 8** below, opening an MTS right next to this campus - and with an entrance ramp just a mere 11 feet from the toddler playground and one of the city's busiest soccer fields where hundreds of trucks per day will line up and idle to dump their waste – it will literally cut Asphalt Green in half. This will harm all children including the low-income families and children of every color who currently benefit from Asphalt Green's free programs.

The East 91st Street MTS Will Not Relieve Overburdened Communities

The East 91st Street MTS has become an expensive and inaccurate symbol of the concerns about traffic in neighborhoods of Brooklyn, Queens and the Bronx that are overly burdened by waste-hauling trucks en route to nearby transfer stations. Pledge 2 Protect agrees that these concerns must be addressed, and the City needs

to take steps to reduce or eliminate the pollution these communities face. ⁹⁵ Unfortunately, even if it is built, the East 91st Street MTS will not provide any substantial relief for these neighborhoods, because it will not divert significant amounts of traffic or air pollution from any one private transfer station for several reasons:



DAVID MONTANEZ Community Sports League, resides in Harlem

Angela Montanez was an 18- year old mother with a 2-year-old when her ex-husband was incarcerated. That toddler, David, is now in 8th grade. He is captain of Harlem Village Academy's Flag Football Team, which plays in Asphalt Green's free Community Sports Leagues for middle school students.

Until his school started playing in Asphalt Green's leagues, David had never played organized sports. His school has won the CSL championship the last two years. They practice regularly and hold their players to high standards for behavior. David was named captain because he holds himself to a higher standard, too.

Angela is proud of her son. So proud, that she and David's stepfather bring their three children to watch the games every Saturday night. They travel to Asphalt Green from 151* Street and 8th Avenue – and haven't missed a game all season.

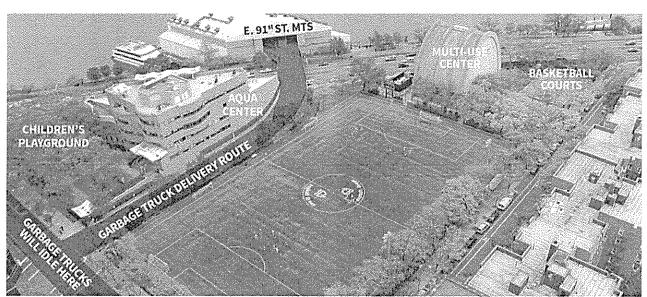


FIGURE 8: Truck Ramp Cutting Through Asphalt Green.

East 91st Street MTS Harms the Very People that the SWMP was Designed to Protect

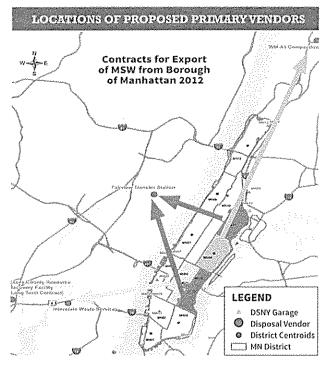


FIGURE 9: Current Residential Garbage Truck Routes

1. None of Manhattan's Residential Garbage Goes to Other Boroughs

All of Manhattan's residential garbage is trucked directly out of Manhattan to New Jersey with a small portion (less than 1%) traveling along the Major Deegan Highway to Yonkers. ⁹⁶ It does not travel on City streets in the neighborhoods of Brooklyn, Queens and the Bronx that have rightly advocated for relief. If the East 91st Street MTS is built, this will not change. If the East 91st Street MTS is built, disposing of Manhattan's residential garbage from four Manhattan districts will shift from trucks to dirty tugboat-driven barges traveling along the East River to Staten Island. Manhattan's eight other districts will continue with the current truck-based system that is in place today.

2. Permitted Commercial Garbage Will Not Reduce Truck Traffic in Other Communities

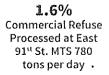
The communities in Brooklyn, Queens and the Bronx will still not see relief, as the negative impacts of trucks traveling through their neighborhoods are not from the City's current residential waste disposal system, but from its commercial waste disposal system. If it attracts its maximum permitted amount of commercial waste, the East 91st Street MTS will divert only 1.6% of the total waste stream's garbage that would have otherwise gone to New Jersey, Brooklyn, Queens or the Bronx, as shown in Figure 10.97 The

data shown in this chart is based on the tons per day of waste generated in NYC, presented by the CBC, and includes both refuse and recyclables from each of the three waste streams.

As highlighted previously, it is unlikely that that commercial carters will choose to route their commercial waste to the East 91st Street MTS for four reasons:

- It is an out-of-the way location;
- It will have strict operating capacity (total tons per day or tpd) permit limits;
- It is a single location without another close by in the event that capacity has been reached; and
- It will need high tipping fees to cover its high costs of construction and operation

All of this makes it highly unlikely that private trucks carting commercial waste will find the East 91° Street MTS to be an efficient, cost-effective destination. Plus, those trucks that do tip at the MTS will still need to return to their home garages, which will continue to be located in the same Bronx, Brooklyn and Queens communities as they are in today.



1.5%
Residential Refuse
Processed at East
91" St. MTS 720
tons per day

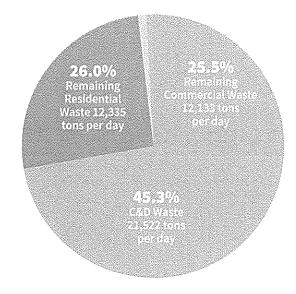


FIGURE 10: Distribution of NYC solid waste

More specifically, the East 91st Street MTS will not significantly alter the trucking patterns in non-Manhattan communities for the following reasons:

- **Commercial garbage sent to East 91st Street will** not benefit any one neighborhood in Brooklyn, Queens or the Bronx: Because the East 91st Street MTS is only permitted for 780 tons per day of commercial waste, it will eliminate only 1.3% of the in-City truck miles of the solid waste system.91 As a result, transferring these truck-miles will not shift enough trucks to significantly benefit any single neighborhood that currently receives commercial waste.92 Moreover, roughly 50% of Manhattan commercial waste is handled by trucks based in New Jersey, 25% is handled by trucks based in the Bronx, and the remaining 25% is divided among trucks based in Brooklyn or Queens. This will further decrease the likely benefits to any single neighborhood in Brooklyn, Queens or the Bronx because any reduction in truck miles will be spread across the entire region instead of concentrated in particular neighborhoods.
- Marine transport (tugboats) does not meaningfully reduce long-haul truck miles: Replacing

long-haul trucking with marine transport will not actually meet projections to displace truck miles in the solid waste program, which involves almost 73 million miles per year. Long-haul trucking constitutes only 5.5% of the in-City truck mileage associated with the City's solid waste removal. 99 In fact, building the East 91st Street MTS would eliminate only 230,000 long-haul miles per year, less than 0.3% of the total long-haul miles within the City. 100

As shown in **Table 9**, when comparing miles and emissions with and without the SWMP in place, it is apparent that the net impact of the SWMP will be that it will not significantly reduce reduce mileage or emissions. Thus, spending billions of dollars achieves only marginal gains with imperceptible impact on any one community. It will not help the City address the real issues and concerns, about traffic and pollution in many communities and will be a poor return on investment. New Yorkers need a solid waste management plan that will truly relieve the burden felt by many people in communities throughout the City, that reduces the impacts of truck-based transport, that is cost-effective and that builds a sustainable solution for the future generations.

	INVERTO PLAN			OJAMEDS GMWS		
SOURGE	ANNUAL MILLES	NOx (UPV)	PM (TPY)	ANNUAL) MILLES	Mox Mox	PM (PPY)
DSNY Trucks	17,083,639	55.3	0.58	16,727,669	54.2	0.57
Commercial Trucks	51,372,000	1,162.1	58.1	51,201,610	1,158.3	57.9
Long Haul Trucks	3,977,809	73.1	3.5	1,822,729	33.5	1.6
Tug Boats	0	0.0	0.0	108,360	31.6	0.6
Facility Operations	0	0.0	0.0	0	11.2	0,3
TOTAL	72,433,448	1,290.6	62.2	69,860,368	1,288.8	61.0

^{*}Please note that the net effect of the SWMP does not help the City significantly reduce mileage or emissions.

TABLE 9: Comparing Mileage and Emissions under Interim Plan and East 91" Street MTS Scenarios.

East 91st Street MTS Exacerbates Citywide Pollution Concerns

ontrary to the goals of the SWMP, the East 91st Street MTS will not help reduce pollution, but rather will increase some forms of it citywide. The City has a long history of chronically poor air quality and is classified as a "severe" nonattainment area for ozone or "smog". This means that NYC is a region where air pollution levels *persistently exceed* the national ambient air quality standards. Moreover, NYC has never met the EPA's particulate matter air quality standards. Diesel trucks and other diesel engines have been a significant source of this problem for decades.

Diesel Engine Pollution is a Persistent Health Issue in New York City

Air pollution comes in many forms, and has been linked to many serious health impacts, including heart and lung problems, cancer and premature death. In fact, in June of 2012, the World Health Organization classified diesel engine exhaust as a carcinogenic. ¹⁰³ Some of the more important diesel pollutants that impact communities are described below:

- Particulate Matter: (PM) exposure has been linked with many serious health impacts, including increased asthma emergencies, bronchitis, cancer, emphysema, birth impacts and premature death. According to a recent Massachusetts Institute of Technology study, PM emissions from vehicles cause nearly 60,000 premature deaths in the United States every year. ¹⁰⁴ PM is regulated by size: PM_{2.5} refers to particles that are smaller than 2.5 microns in diameter, and PM₁₀ refers to particles that are smaller than 10 microns in diameter. Many public health experts believe that smaller particles are more dangerous, because they are small enough to evade respiratory defenses and lodge in the deepest parts of our lungs.
- Nickel: Prolonged and continuous exposure to nickel produces both acute and chronic respiratory and gastrointestinal distress, skin conditions and impaired kidney function. Nickel is a component of PM_{2.5}.
- Oxides of nitrogen (NO_x): NO_x is linked to numerous respiratory and other health impacts and is a precursor to ozone, a major component of smog.
- Sulfur Dioxide (SO₂): Prolonged exposure to SO₂ impairs the respiratory system.

A large body of research has found that **diesel exhaust** is **especially harmful** to sensitive populations such as **children and seniors**. Studies published since 2009 have found the following:

- Diesel particulate matter is linked to childhood development of asthma, especially in homes near high densities of truck routes. 105, 106
- Exposure shortly after birth to ambient particles from diesel emissions is associated with *respiratory* symptoms in young inner-city children. 107, 108, 109

In 2012, the World Health Organization's cancer research arm classified diesel exhaust a human carcinogen.

- Prenatal exposure to polycyclic aromatic hydrocarbons (PAHs), which are a byproduct of diesel combustion, may lead to behavioral problems among children, including anxiety, depression and attention problems. 110,111,112
- There is also evidence to show that prenatal exposure to PAHs can also lead to higher childhood obesity rates, as studied among children in the Bronx and Northern Manhattan, and a host of other serious conditions, including pulmonary and cardiac dysfunction. 113, 114
- Prenatal exposure to diesel exhaust can lead to preterm births.¹¹⁵
- Children exposed to higher PAH levels scored lower on IQ and standardized tests than less-exposed children. 116, 117

Children are at greater risk for adverse health effects from air pollution than most adults. This heightened risk exists because children have lungs that are not yet fully developed; they breathe faster than adults, taking in more air, and they generally spend more time outdoors. This is, of course, critically important to the question of whether a major new source of diesel PM emissions should be introduced immediately next to Asphalt Green. Many of these children already face a disproportionately high risk of asthma, especially the children from nearby East Harlem.

In addition, thousands of children who attend one of the 11 day care centers or one of the 16 schools located within a half-mile of the MTS site will also face much greater exposure to harmful diesel exhaust from the trucks approaching or leaving the MTS, further increasing their risk of health impacts. The children living in the three NYCHA buildings near the East 91° Street MTS will also be at risk. In fact, roughly 28% of

those buildings' residents are children—an estimated 1,600 children. 118

Seniors are also an at-risk population as they are especially susceptible to ozone and particulate matter inhalation. These emissions can cause or exacerbate asthma, respiratory illnesses and aggravated heart conditions among an aging population. Of the approximately 5,700 residents in the three NYCHA facilities near the East 91street MTS, 35% are over the age of 62.119 Thus, nearly 2,000 seniors and the aforementioned 1,600 children are already living in low-income facilities that could be exposed to harmful levels of air pollution from the East 91st Street MTS' waste management operations.

East Harlem and Yorkville Is One of Four Remaining Sulfur Dioxide Hotspots in the City

The neighborhood surrounding the East 91st Street MTS is in one of the four remaining of the four remaining sulfur dioxide pollution hotspots that exist in the City.

In recent years, thanks to the City's Clean Heating Oil program and the implementation of federal EPA emissions standards for diesel trucks and buses, SO₂ and nickel concentrations have dropped dramatically citywide. Despite improvements, SO₂ and nickel hotspots still exist in the East Harlem and Yorkville neighborhoods, home to the proposed East 91st Street MTS, as **Figure 11** shows.¹²⁰ None of the City's other existing or

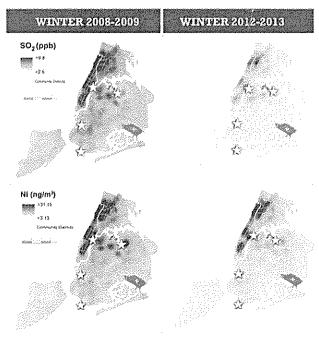


FIGURE 11: NYC CAS emissions data during the winters of 2008-09 and 2012-13 (white stars - sites of 4 MTS facilities proposed in the SWMP)

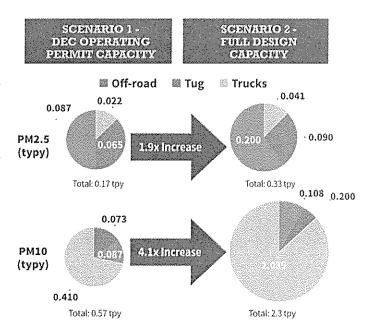


FIGURE 12: Comparing PM emissions between permitted capacity and total design capacity

planned MTS locations are in such hotspots. Adding hundreds of diesel trucks, waste-handling equipment, and high-polluting tugboats to the East Harlem and Yorkville neighborhoods will only exacerbate one of the City's most enduring pollution problems.

East 91" Street MTS Emissions Quadruple Compared to 2006 Full Capacity Estimates

As shown in **Figure 12**, when the facility operates at full design capacity, PM_{2.5} and PM₁₀ emissions at Asphalt Green are projected to be 1.9 and 4.1 times greater respectively than a typical day.¹²¹ Most of the growth in PM₁₀ emissions will come from the trucks that will be lining up to drop their trash on those days when the plant is operating at full design capacity. Given that the operating permit allows the City to accept waste up to the full design capacity when a snow storm or other event creates an Upset or Emergency Condition in the solid waste system (something that happens roughly 10 times annually, on average), emissions at full design capacity are the appropriate benchmark for estimating the maximum pollution impacts at the site and in the neighborhood.¹²²

In addition, given that the operating permit will expire in 2014, there is no guarantee that the current tonnage limits will be extended into the next permit.

Trading Trucks for Tugs Increases NOx Pollution Citywide

Reducing truck miles by shifting waste to tugs and

barges was a central objective of the SWMP in 2006. The DSNY asserted that there would be significant reductions in annual miles travelled by trucks if the East 91st Street MTS were built. However, this analysis neglected the impact of adding substantial new tugboat activity and the resulting overall increase of NOx emissions in the City - a major oversight.

To answer the question of whether trading trucks for tugs was a good idea from the perspective of the City's air quality, the annual emissions of PM2.5 and NOx from the East 91st Street MTS were modeled. 123 As shown in Figure 13, shifting to marine transport will increase emissions of NOx related to the waste handled by the East 91st Street MTS by 25% and decrease PM_{2.5} by 26%, respectively. 124

In contrast, continuing the current truck-based system in Manhattan, but also retrofitting the private trucks carting commercial waste will reduce citywide PM2.5 emissions from solid waste removal by 70%.125 This will provide far greater emission reductions to the communities overburdened by the current solid waste management system than building any MTS or anything else in the SWMP.

Further, as shown in Figure 14, if the East 91" Street MTS is built, it will quickly adversely affect other boroughs. Tug boats spewing toxic emissions will travel up and

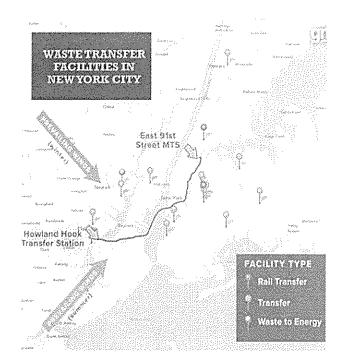


FIGURE 14: Proposed Tug Route and Prevailing Winds 176

down the East River to Staten Island, increasing pollution levels across the waterfront communities of Queens and Brooklyn as prevailing westerly winds blow the tug emissions to the east.

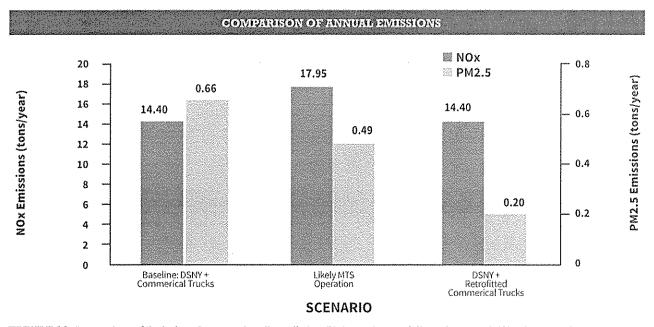


FIGURE 13: Comparison of Emissions Between Baseline, Likely MTS Operation, and Clean Commercial Trucks Scenarios

esides the air pollution issues that have been the main environmental focus of the SWMP debate, building an MTS near thousands of children raises additional questions about the use of pesticides at the facility, potential safety risks from the trucks entering and leaving the truck ramp, noise impacts during construction and operation, and the emergency procedures if hazardous materials are found on any of the trucks.

Pesticides Impact Brains of Children; New Research Raises Concerns

Pesticides are the primary resource to control the presence of rodents and other pests near garbage facilities. However, since 2006, there has been significant new evidence to substantiate the claims that pesticides have a destructive effect on developing children as early as the fetal stage. Most recently, an article in the August 2013 issue of *Science*¹²⁸ summarizes a study that tracked the long-term consequences of pesticide exposure on the developing brain during pregnancy and the early years of life, finding effects such as IQ deficits, ADHD-like behavioral problems, and interference with the normal sexual development of the brain.

By the age of three, children with high exposures of pesticide test up to six points lower on motor skills and three points lower on cognitive functioning. In discussing the link to IQ, researchers at Mt. Sinai stated an average drop of five IQ points could lead to a 57% increase in the number of children with intellectual disability. In the United States this would be a shift from 6 million to 9.4 million children. In addition, the number of gifted children would decrease from 6 million to 2.4 million. 129

However, the City has not disclosed its plan for the use of pesticides at the East 91st Street MTS, which raises important questions:

- Which chemicals will be used, in what quantities and how frequently?
- Will pesticides be sprayed around the facility on the outside near the Esplanade where people enjoy recreational activities?
- Will they be sprayed along the ramp near the Asphalt Green playing field?
- What is known about the impact on children of the chemicals that they plan to use?

There is no evidence that the City has taken steps to incorporate the latest understanding of the health impacts of childhood exposure to pesticides that may be used at the East 91st Street MTS.

Noise Pollution Poses Additional Health Threats; Noise Code Amended

Noise levels are a serious concern, especially in cities with chronically high noise levels like NYC. According to noise expert Arline L. Bronzaft, Ph.D., recent studies have linked noise to cardiovascular and circulatory disorders. Continuous noises have also been found to intrude on sleep, which adds to the burden on health and quality of life. ¹³⁰ In addition, there are strong associations between noise and decreased academic performance, which is an issue for the children in the 16 schools and 11 day-care centers within one-half mile of the MTS. ^{131,132}

In 2007, the City revised its Noise Code to preserve, protect and promote the health, safety and welfare of its inhabitants. The new Noise Code acknowledged that every person is entitled to ambient sound levels that are not detrimental to his or her life, health or property. 133 However, because the Environmental Impact Statement (EIS) for the East 91st Street MTS was written prior to the revised Noise Code, there is no public information about the steps that the City will take to adhere to the new regulations regarding construction noise, or what steps will be taken to reduce noise during MTS operations.



ANNIR (O) EORRIS

Asphalt Green swim team, scholarship recipient, resides in Brooklyn

Antrico Forbes was born in the Bahamas and his mother enrolled him in swim lessons when he was 9. A single mom, she wanted to protect her son. Antrico remembers, "I went to Florida every summer to spend time with extended family. I was around the ocean and the pool; she wanted me to be safe in the water."

That gave him confidence. He tried out and made a YMCA team, where he swam until coming to Asphalt Green at 15. In the summer, Antrico rides his bike all the way from Crown Heights, Brooklyn to Asphalt Green to save money on MetroCards. "In a lot of ways you can relate swimming to life," Antrico says. "It's not going to be easy. It's always going to be a challenge. You sometimes put in a lot and you don't get that much out of it. But swimming helps me be more mature. I can work well under pressure. I don't give up anymore. I push through my sets and that helps me push through life." Antrico now attends SUNY Cortland. He is the first person in his immediate family to go to college.





NISSI AND JILLIAN FLYNN Asphalt Green summer day camp, Scholarship recipient

When you ask 6-year old Nissi Flynn what her favorite part of Asphalt Green's Summer Day Camp is, she responds with "Coins for Campers!" Nissi is one of over 600 children who attend Summer Camp at Asphalt Green, and one of whom received a scholarship. This summer, Nissi worked hard for the Coins for Campers drive, selling lemonade and emptying her Hello Kitty piggybank to help raise money so other children could receive a scholarship.

Nissi lives with her adoptive mother, Jillian, in Yorkville. A teacher at a public school in Harlem, Jillian is grateful for the experience Summer Camp provides Nissi, exposing her to the community, introducing her to sports, and meeting kids from different neighborhoods.

Jillian and Nissi also regularly visit Yorkville's remaining green spaces, including Carl Schurz Park and the East River Esplanade. Both have concerns about the Marine Transfer Station. Jillian says, "As a member of a moderate income household in one of the few places left in Manhattan that retains some of its working class roots, I am distressed about the negative effects the MTS will have on our vibrant community. After spending time in Africa I realized that as a culture Americans need to learn to consume less and recycle more, which would contribute to curbing our huge problem with waste."

Nissi has other concerns, "Kids with asthma that want to play would get worse; And if another storm comes, all the trash would wash up on Asphalt Green." She simply asks, "Where will the kids play?"

Escalated Safety Risks with Trucks and Children

The potential for escalated safety risks for the children near the truck ramp is another concern that needs to be addressed. There is no other location in NYC where one million visitors (accounting for over two million visits per year)—who are overwhelmingly children—will commingle with hundreds of garbage trucks daily. At the corner of York Avenue and East 91st Street, pedestrians, school buses and trucks will be navigating around each other all day and night. Not only is this bad policy, but it is also our moral obligation to protect children from such imminent danger. Before proceeding any further with planning or construction, the City should review

the safety measures in place, and should create a plan to mitigate any potential safety risk, consistent with Mayor de Blasio's commitment to zero traffic fatalities citywide as part of his "Vision Zero" policy.

As seen in the photograph (**Figure 15**) below, the entrance ramp to the East 91st St. MTS cuts directly through the sidewalk and pathway used by tens of thousands of pedestrians and children entering Asphalt Green.

No Plan to Protect the People if Hazardous Material is Received Into the East 91st Street MTS

There are many aspects of the East 91street MTS that are of great concern to the people who use Asphalt Green and the residents of the surrounding communities that need further investigation and answers from the City. There is no plan to protect the people at Asphalt Green or in the community if hazardous material is received at the East 91street MTS. While the East 91street MTS



FIGURE 15: Asphalt Green at East 91° Street and York Avenue. One million visitors cross the entrance to the MTS to access Asphalt Green every year.

is not designed to handle hazardous waste, there is the potential that trucks carrying this waste (e.g., medical waste) will arrive at the MTS. In fact, DSNY has procedures for these occurrences. However, although the City has made plans for the evacuation of all City employees in case of a toxic and dangerous situation, it has not created or disclosed any plan to secure the safety of the children, seniors or adults at Asphalt Green or the surrounding community if this were to happen.



Superstorm Sandy brings flood waters to surround the old MTS structure, over the FDR and into Asphalt Green.

Zoning Laws Would Not Allow a Private Transfer Station Near Children and Public Housing

like the East 91st Street MTS from being built so close to parks, playgrounds, public housing and schools, if it were privately owned and operated. Title 16 of the Rules of the City of New York states that "any new transfer station shall be at least 400 feet from a residential district, hospital, public park or school." While the regulation does not cover a City-owned facility (or a grandfathered nonconforming use, as is the case with the East 91st Street MTS), the City is ignoring the spirit of the zoning rule, which is designed to protect children.

Although many people believe that the new East 91st Street MTS is just a conversion of an existing facility, this is not actually the case. The City has torn down that old structure, and is building a new structure that will be much taller, wider, and larger than the prior facility—imagine two football fields 10 stories high—and which will process far more garbage and attract many more trucks every day. In every sense, the new East 91st Street MTS is a new facility, not a "converted" facility, as erroneously labeled in City documents and voted on by the City Council.

Specific ways that the East 91st Street MTS would violate the City's zoning law if it were a new, privately owned transfer station:

- The MTS will be less than 400 feet from Asphalt Green. In fact, the ramp that the trucks will use to enter and leave the MTS cuts Asphalt Green in half and will be only 11 feet from Asphalt Green's main entrance.
- The East 91st Street MTS will be within 400 feet of public housing and residential buildings. Residents of two NYCHA public housing projects and other apartment buildings will be within the 400

feet limitation of the MTS.

■ The East 91st Street MTS will be located within 400 feet of a public park. In fact the MTS site is within 400 feet of three public parks: it abuts the Bobby Wagner Walk, which is part of the Manhattan Waterfront Greenway; the DeKovats Park, located 11 feet from the MTS ramp; and Carl Schurz Park just 300 feet South of the MTS.¹³⁵

The long-term damage that will be caused by truck traffic adjacent to Asphalt Green and so close to so many parks and residences cannot be disputed, because the City has expressly prohibited the siting of private waste transfer stations at similar locations due to their adverse impacts.



D)AV/ID)ID)I/AV/

Asphalt Green swim team, resides in the Bronx

"My whole life has changed because of swimming at Asphalt Green," says David Diaz, an 18-year-old and first-time Swim for the Future Scholar. "Other people around me make negative choices: drinking and drugging, in and out of jail... Swimming keeps me from doing things that are counterproductive."

David began swimming just five years ago. When he earned a job as a lifeguard, he began to realize that swimming could be more than a sport. The discipline and work ethic learned through swimming started to filter into all aspects of his life. "I never thought about going to college until I came to Asphalt Green," David reveals. Today, David attends Indian River State College.

T East 91st Street MTS Conflicts With Public Policy, Zoning and Land Use Regulations

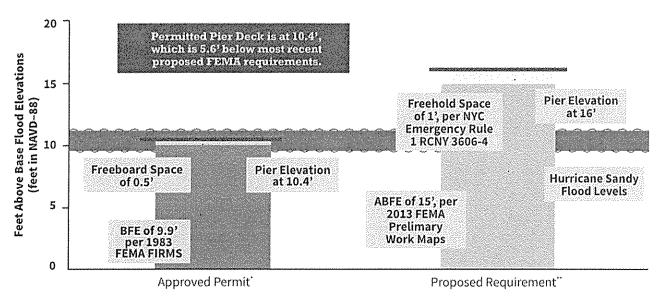


FIGURE 16: Approved East 91" Street MTS permit compared to new proposed FEMA guidelines, 126

Post-Superstorm Sandy Federal Guidelines Ignored The East 91st Street MTS faces the potential of costly damages if a storm like Superstorm Sandy hits the City again. According to the Bloomberg administration, estimated flood levels at the East 91st Street MTS, if it had been already built, would have been up to six inches above pier level. ¹³⁷ A January 2013 report commissioned by the NYC Department of Design and Construction (DDC) found that Sandy would have caused substantial damages throughout the East 91st Street MTS if it had been built according to its approved building permit. As flood levels crested above the pier level, all equipment on the pier level could have been damaged critically, if not lost completely. ¹³⁶ Damaged equipment could have taken six months or more to be replaced, and could have cost as much as \$25 million. ¹³⁹

Despite this information, the City is proceeding without raising the pier. As a result, the building will be built almost six feet below new FEMA flood regulations, which are expected to be finalized in early 2014. It is located in Flood Zone AE, the highest FEMA flood risk designation.¹⁴⁰

Ironically, DSNY received its building permit for the East 91st Street MTS just five days before Sandy hit.¹⁴¹ The approved building permit for the East 91st Street MTS was based on the Federal Emergency Management Agency's (FEMA) then-existing Flood Insurance Rate Maps, which had not been updated since 1983 for that area.

Since then, City and federal agencies have made significant updates to flood and storm protection regulations. At the East 91st Street MTS, FEMA's proposed new base flood elevation (BFE) would raise the BFE from 9.9 feet to 15 feet. Be-

cause NYC's Emergency Rule requires a one-foot freeboard space above the BFE for the area surrounding the East 91st Street MTS, ¹⁴² it would have to meet a minimum elevation of 16 feet if it were to be proposed after the FEMA BFE was finalized. This is more than five-and-half feet above the currently proposed pier level. ¹⁴³ as shown in **Figure 16**.

Rather than ignore the new BFE, the City should redesign the MTS to be above this minimum BFE so it can determine the true cost of moving ahead. Current plans overlook the best practices for flood protection, as well as the latest science and data about sea level rise and flood risk by keeping the design as-is, with some additional "flood-proofing" around the perimeter and critical rooms of the building. It is worth noting the recently opened Sims recycling plant in Sunset Park, Brooklyn was built four feet above the City's flood requirements, a design precaution taken years before Sandy hit. In contrast to the East 91st Street MTS site, there was no flooding at all at the Sims site during or after Sandy.

The piecemeal flood-proofing measures that have been proposed for the East 91st Street MTS can be easily rendered useless by a single breach in the system and leave the entire facility defenseless against a storm as powerful as Superstorm Sandy.

NYC Vision 2020 Waterfront Access for Yorkville and East Harlem Ignored

In March of 2011, the NYC Department of City Planning (NYC DCP) released, "Vision 2020: New York City Comprehensive Waterfront Access Plan." According to then-NYC DCP Commissioner Amanda Burden, "The last Comprehensive Waterfront Plan, published by City Planning in 1992, called



The MTS ramp will bring hundreds of trucks per day within 11 feet of DeKovatz Park, a children's playground.

for the redevelopment of the water's edge, opening it up for activity and enjoyment. *Vision 2020* reconfirms the City's commitment to improving the waterfront and takes the next step—into the water itself." It should be noted that Vision 2020, calls for a strategy to link the entire East River Greenway, but makes no mention of the neighborhoods of Yorkville and East Harlem. Yet, *Vision 2020* proposes redevelopment of waterfront neighborhoods throughout Manhattan and the other boroughs.

Why have these communities been ignored and what accounts for this disconnect with the East River Greenway plan? On days with good weather, individuals can be seen bicycling, fishing, running, and walking in the areas adjacent to the proposed MTS site. Once the MTS is built, between the truck pollution and odors from the site itself, people from Yorkville and East Harlem will no longer have a pleasurable nor safe location for their activities.

If the plan to build the East 91st Street MTS were suspended, the savings from the capital dollars could be used to develop the waterfront in this location, and the East Harlem and Yorkville communities could be part of the revitalization of Manhattan's waterfront. This would dovetail nicely with the goals of *Vision 2020* to "expand public access to the waterfront and waterways on public and private property for all New Yorkers and visitors alike." ¹¹⁴⁷ It also supports Mayor de Blasio's proposal to renew our waterways, "the same way that the High Line has transformed urban blight to a rich community space." ¹⁴⁸

The City should use the East 91st Street platform to

create a pier and give waterfront access to the East Harlem and Yorkville communities.



REYNOSO FAMILY Asphalt Green swim team, scholarship recipients, resides in the Bronx

The Reynoso Family has been coming to Asphalt Green for over a decade. All three of Evelyn's children—BJ who is 22; Jessica who is 16; and Jennifer, who is just 8 years old—swam or currently swim with Asphalt Green. Swim for the Future has made it possible for the Reynoso Family to pursue competitive swimming.

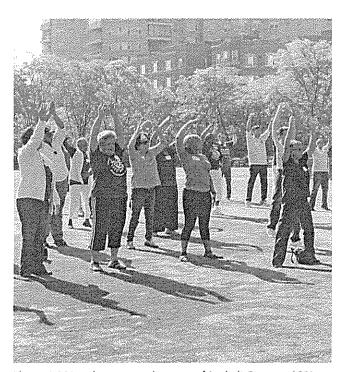
As a young boy, BJ struggled with asthma, His doctor recommended that he start swimming. If it weren't for that, Evelyn says that her children's lives would be quite different. When Jessica had her birthday this year, her teammates were first on the list for her Sweet 16. Evelyn exclaims, "Asphalt Green has been the best thing that has happened to me in my life. It has kept my children safe and out of trouble, Being on the team has taught them how to be friends with everyone." Today, Jessica is attending Savannah College of Art & Design.

Conclusion and Next Steps

ur vision reduces the solid waste burden for all New Yorkers. Our approach makes New York a leader in recycling and creates goals for a truly progressive post-recession, post-Sandy solid waste plan. If implemented, our vision would help ensure that children and other New Yorkers in every neighborhood will breathe less harmful diesel pollution. The City will be further along a path to a more sustainable solid waste future and will have a more cost-effective and reliable solid waste program that frees up funds that can be used to meet the City's many pressing needs.

Specific next steps to move this vision forward are:

Create a new long-term solid waste plan that reduces the tonnage of the City's waste, increases the amount of recycling and composting, and takes advantage of emerging, sustainable waste-to-energy projects. The current SWMP actually furthers the City's reliance on trucking - in fact, more than 90% of the City's solid waste-related truck miles are unaltered by the current SWMP.¹⁴⁹ A modernized new, sustainable solid waste plan should account for the needs of over-burdened communities and sensitive populations like children and seniors. It would also review the City's current commercial truck routes and suggest alternatives that reduce the impacts of the City's trucking on residential communities.



Almost 1,000 seniors are regular users of Asphalt Green and 350 seniors are part of free outreach programs

- The City should lead by example, and launch an aggressive recycling and composting program for all City schools and public agencies. With its pioneering use of recycled paper and purchases of natural gas and hybrid-electric sanitation trucks, the City has used its own purchasing power and resources to kick-start broader changes in the sustainability of solid waste management in the past. As a first step towards reducing the amount of solid waste that the City needs to transport to distant landfills, the City should commit to an aggressive recycling and composting program for all City schools and public agencies.
- Review and re-evaluate the plans to build the proposed Southwest Brooklyn MTS. Although the IBO has not studied cost escalations at locations other than the East 91street MTS, we are concerned that the other MTS projects may face similar cost escalations, since they are based on similar designs. In particular, the de Blasio administration and/or the IBO should review the current cost impacts of the Southwest Brooklyn MTS project before proceeding further.
- Suspend the plan to build the East 91st Street MTS. By suspending this project now and maintaining the interim plan while developing a more sustainable solid waste plan, the City would free up critically needed operating budget dollars immediately. According to the IBO, doing so would save \$26 million in the first fiscal year, \$106 million over the first four fiscal years of operation, and more than \$600 million over 20 years (now a projected cumulative cost of over \$1 billion).¹50 In the process, it also would avoid subjecting one of the City's most densely populated communities and the diverse users of one of the City's most valued sports and recreational facilities to significant negative environmental, safety and health impacts.
- Use the savings from the East 91st Street MTS and potentially other SWMP amendments to provide effective and timely solutions to communities in need of relief from pollution from the current waste management system. For example the City should consider investing some of the savings into incentives that will help private carters retrofit or replace their trucks to ensure they comply with the new Local Law 145. Other cities and port authorities have had great success with programs that either subsidize or provide low-cost financing for the purchase of diesel particulate filters to accelerate their use, including the Port Authority of New York and New Jersey and a city program at the Hunts Point mar-

ket. Successfully implementing this new law will reduce citywide particulate emissions from solid waste removal by 70% and will bring far greater air pollution relief to communities with truck garages, transfer stations, and truck routes than the current MTS strategy—or anything else in the SWMP.¹⁵¹

- Allocate portions of the savings toward critical housing, social services, educational and other programs. These could range from creating new after-school programs to improving, preserving or creating affordable housing for poor and working-class residents, to preserving and expanding open space like parks and playgrounds, and to expanding NYC's police force.
- Give waterfront access for East Harlem and Yorkville residents, expanding the services offered to NYC for physical activity. Other than the small strip of parkland between the FDR Drive and the East River, these densely populated, residential neighborhoods have no open space or access to the waterfront. Over the past decade, formerly industrial waterfronts throughout the City have been reclaimed for park and open space, and have created jobs, economic opportunities and revitalized neighborhoods in every borough. It's time to consider improvements to this overlooked stretch of waterfront.

While some may claim that the SWMP must be implemented as designed, a closer review reveals that the SWMP is fraught with issues: increased costs, a lack of a progressive vision and it actually perpetuates serious health and safety risks in many communities. It does not even reduce the burden of today's excessive commercial waste stream. Instead, it merely attempts to shift it from one set of neighborhoods to another—including one that is more densely populated than any other neighborhood that currently houses a transfer station. Plus, it increases the cost of solid waste disposal at a time when there are many other more critical fiscal demands on finite capital and operating budget resources.

Despite recent reports that the de Blasio administration inherited a balanced budget for fiscal year 2015, hanging over the new administration de Blasio are expired labor contracts with more than 150 municipal-worker unions that the Bloomberg administration did not account for in its "balanced budget". In addition, the significant budget deficits projected in the "out years" of FY 2016, FY 2017 and FY 2018 will cause additional strains on limited resources. Given the ballooning costs and fiscal drain of the SWMP, it is unacceptable to continue on this path, espcially because it will not lead to a more modern, sustainable solid waste future.

It's time to "hit the pause button" on the 2006 Solid Waste Management Plan. The City and its residents should not have to inherit the outdated solid waste management plan from the Bloomberg administration, which includes an MTS approach first advanced in the Giuliani years. We call on the de Blasio administration to review and audit the excessive costs and unanticipated impacts of the SWMP, and to use this review period to create a more modern, truly progressive and sustainable plan for the City's garbage that reduces the overall tonnage of waste, makes the City a world class leader in recycling and composting, takes advantage of emerging and cost-elective energy recovery strategies and reduces the overall burden of waste disposal from communities in all five boroughs of our great City.



JONATHAN CRIMES Asphalt Green swim team, scholarship recipient, resides in Brooklyn

Jonathan graduated from SUNY Binghamton in 2009 with a B.A. in Psychology. He swam for two years on the team and received a scholarship. Now working for Bank of America, he is also earning his Master's degree in Psychology from Binghamton University. Jonathan remembers the long commute from Ocean Avenue in Brooklyn to Asphalt Green for morning practice almost nine years ago. After practice, he would travel back to Brooklyn, where he attended James Madison High School. Jonathan was astounded by the 50-meter pool. "I would swim butterfly and think how far it was until I touched the wall. My legs would be so tired after practice; the commute helped me rest."

Jonathan has never been afraid of hard work and enjoyed everything about AGUA from dry land training, to practice, to all the people he met. He won the Heisman Public School Athletic League Award in 2003, an award given to the top senior in each sport from New York City public schools. Jonathan remembers swimming in the first Swim for the Future swim-a-thon. He helped fundraise for his own scholarship in 2002 by having people sponsor him. Getting the scholarship made swimming with AGUA possible. "To know that other people understood that it was not as easy for me to swim here, it helped me so much."

¹ "Taxes In, Garbage Out: The Need for Better Solid Waste Disposal Policies in New York City." Citizens Budget Commission. May 2012. http://www.cbcny.org/sites/default/files/REPORT_SolidWaste_053312012.pdf. (Hereafter cited as "CBC Report")

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- ⁵ "Cost and Environmental Issues at the East 91st Street Marine Transfer Station: Implications for the Solid Waste Management Plan and New York City". A Report to Pledge 2 Protect, Inc. Prepared by Gladstein, Neandross & Associates. December 19, 2013, p. 11. (Hereafter cited as "GNA Technical Report")
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- ⁷ PlaNYC was initiated in 2007 and aligned 25 City agencies with the goal of creating a "greener, greater New York." Efforts focus on housing, waterways, air quality, and solid waste, among others. For more information, see their website at http://www.nyc.gov/html/planyc2030/html/home/home.shtml.
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- ¹³ The City of New York Independent Budget Office. Letter to Council Member Jessica S. Lappin, May 22, 2012. Page 6. http://www.ibo.nyc.ny.us/iboreports/wtsletter52318.pdf. (Hereafter cited as "IBO Memo")
- ¹⁴ "Fiscal 2009 Executive Budget Hearings Department of Sanitation (Capital)." New York City Council Finance Division. May 2008.
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- ²² "Hearing on the Fiscal Year 2014 Executive Budget for the Department of Sanitation." The Council of the City of New York. May 30, 2013. http://council.nyc.gov/downloads/pdf/budget/2014/execbudget/deptofsanitation.pdf.
- ²³ IBO Memo, p. 3.
- ²⁴ IBO Memo, p. 6.
- ²⁵ Based on the IBO memo's costs for the interim plan and 91st Street MTS option. This calculation assumes that total annual facility costs remain fixed and equal to the total facility costs in 2016 under the 577 tons per day scenario. Also, the export and transport fees were assumed to be constant on a per-ton basis. Thus, the additional costs of adding throughput are ~\$20 per ton. At 143 tons per day and 302 days per year, this works out to an additional \$806,000 annually. Adding this to the aforementioned \$26 million in incremental costs above the interim plan baseline yields an incremental cost of \$27 million.

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- ³⁵ Calculated using IBO-estimated \$90/ton and 302 operational days per year.
- ³⁶ "NYC Recycling Law." NYC Recycles. The City of New York. http://www.nyc.gov/html/nycwasteless/html/laws/local_recycling.shtml#amendments.
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